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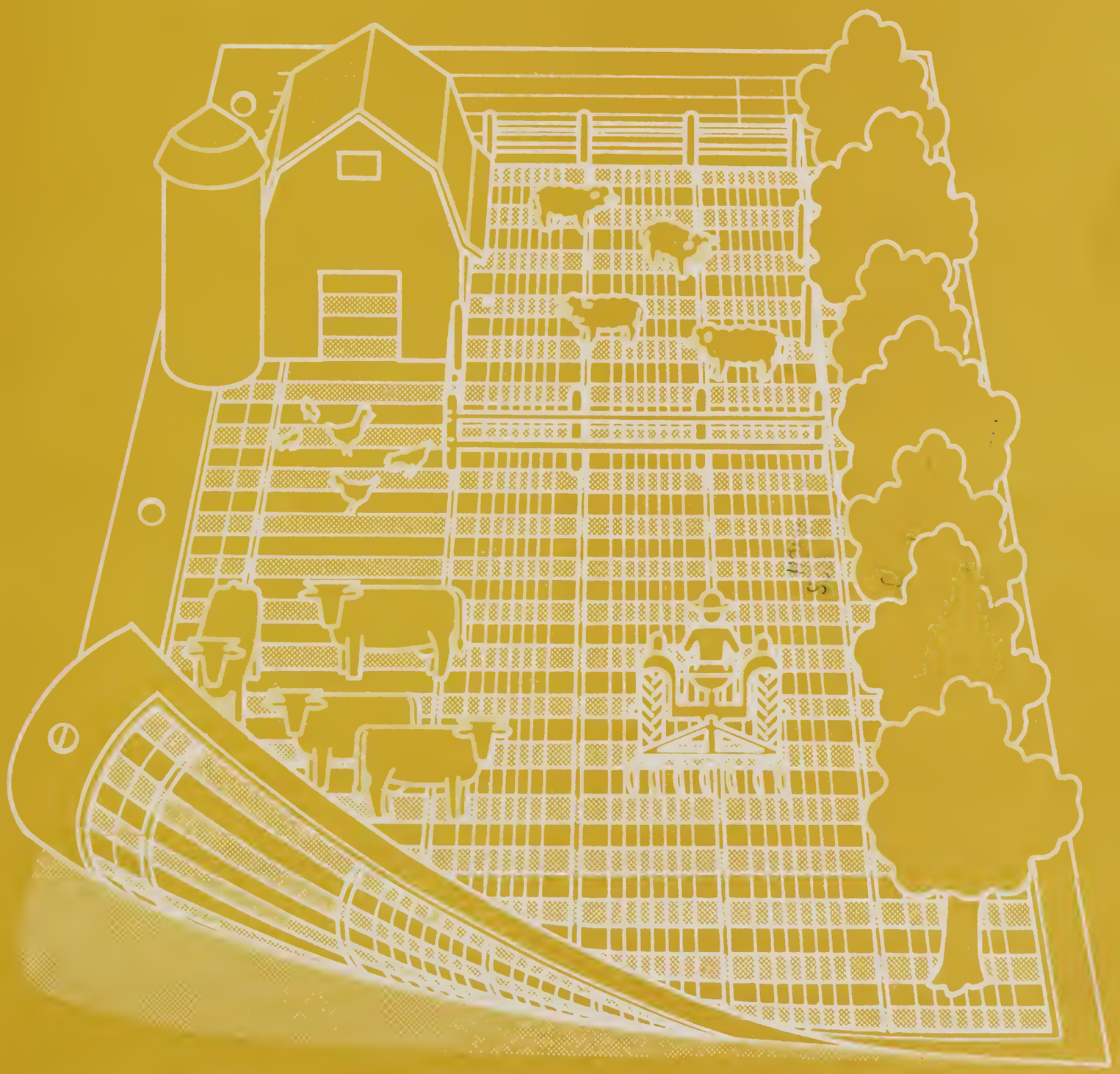
Economic Indicators of the Farm Sector

Costs of Production--Livestock and Dairy, 1989



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Economic Indicators of the Farm Sector: Costs of Production--Livestock and Dairy, 1989. Commodity Economics Division, Economic Research Service, U.S. Department of Agriculture. ECIFS 9-1.

Abstract

Cost-of-production increases for dairy and other livestock enterprises ranged from 1.4 percent for cow-calf operations to 3.5 percent for dairies in 1989. These increases, however, were smaller than the substantial increases in 1988. Tight grain and forage supplies continued in 1989 and kept feed prices high. Despite higher feed costs and other production expenses, net cash returns for milk and beef cattle enterprises improved in 1989. Returns for sheep and hog operations continued to decline for the second consecutive year.

Keywords: Costs of production, costs and returns, feed costs, enterprise budgets.

Preface

This is one of five reports in the annual ***Economic Indicators of the Farm Sector*** series; others are ***Costs of Production--Major Field Crops***, ***National Financial Summary***, ***State Financial Summary***, and ***Production and Efficiency Statistics.***

This report contains enterprise cost estimates for 1987, 1988, and 1989 as well as time series data beginning in 1972. The 1989 estimates are preliminary and the 1987 and 1988 estimates have been updated from 1988 data. Some 1985 and 1986 estimates also have been revised due to revisions in data from the National Agricultural Statistics Service.

The methodology pertains only to livestock and dairy enterprises in estimating livestock and dairy costs of production. This report is prepared by staff of the Livestock, Dairy, and Poultry Branch, Commodity Economics Division, Economic Research Service.

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Economic Indicators of the Farm Sector

Costs of Production--Livestock and Dairy, 1989

1989 Production Costs and Returns

The U.S. Congress, through the Agriculture and Consumer Protection Act of 1973, requires the Secretary of Agriculture to estimate annual costs of producing wheat, feed grains, cotton, and milk. The Economic Research Service (ERS) carries this out and also determines costs for other farm products that compete with these commodities, namely rice, peanuts, soybeans, flax, sunflowers, fed cattle, beef cow-calf, hogs, sheep, and sugar.

This report presents national and regional estimates of livestock and milk production costs and returns. Crop enterprises appear in a separate publication, *Economic Indicators of the Farm Sector: Costs of Production--Major Field Crops.* The estimates are in the form of an enterprise budget divided into three sections: cash receipts, cash expenses, and economic costs. The budgets are based on weighted-average estimates of all costs associated with a particular enterprise. The effects of Government programs are included implicitly in prices and explicitly in some cases (dairy assessment, wool, and unshorn lamb payments). Federal emergency feed programs were made available to dairy and livestock producers in 1989 in response to the 1988 drought. Adequate data were unavailable to incorporate the emergency subsidy into the various enterprise budgets. Any effects of the emergency feed assistance program are not reflected in net returns in this report.

The report is unique because all estimates are comparable across the Nation, and among production categories, livestock types, and years. The same methodology is used for all commodities and primary data collection in a given year.

The data neither represent a specific producer nor are they economically engineered to be "typical" of livestock operations. The data reflect the average costs and returns of milk and livestock production for producers. An individual farm may have different production costs and returns due to the mix of inputs and yield peculiar to a given livestock farm.

On average, costs of production for all livestock enterprises increased again in 1989, but not by as much as in 1988. Tight grain and forage supplies due to the widespread drought of 1988 continued to keep feed costs elevated. Other production expenses increased modestly.

Prices for production inputs continued to rise, with wages and fuels and energy showing the largest increases. Indexes for certain production items changed as follows:

Input	1987	1988	1989
	Percent		
Farm origin:			
Feed	-4.6	24.3	5.5
Hay	8.9	31.1	2.7
Feeder livestock	17.0	7.3	1.0
Nonfarm origin:			
Wage rates	4.4	3.0	8.2
Building	.7	.7	2.2
Autos and trucks	5.1	3.4	3.7
Tractors	0	4.0	6.6
Other machinery	1.6	6.5	5.6
Farm supplies	0	2.8	4.7
Fuels and energy	-.6	1.2	10.4
Farm chemicals	-2.4	1.6	4.8

Residual returns to livestock enterprises improved most dramatically for milk, while fed cattle and feeder pig finishing showed some improvement but still remained negative. Residual returns to cow-calf, farrow-to-finish, and feeder pig production enterprises became even more negative. Residual returns to sheep production were negative in 1989, the first time since 1984. Dairying shows the most favorable return of all the livestock enterprises, followed by sheep production (fig. 1).

Milk--Costs continued to rise in 1989. Total cash expenses rose 49 cents per hundredweight (cwt), and economic costs rose 45 cents per cwt. Most of the cost increase was traced to higher feed costs, a residual effect of the 1988 drought.

Cash receipts increased $1.35 per cwt (10 percent) because of record high milk prices in the latter part of 1989. Net cash returns more than doubled, while residual returns to management and risk were four times higher in 1989 than in 1988, despite higher costs. However, both of these measures

Figure 1
Returns to livestock enterprises, 1989; cash receipts as a percent of economic costs

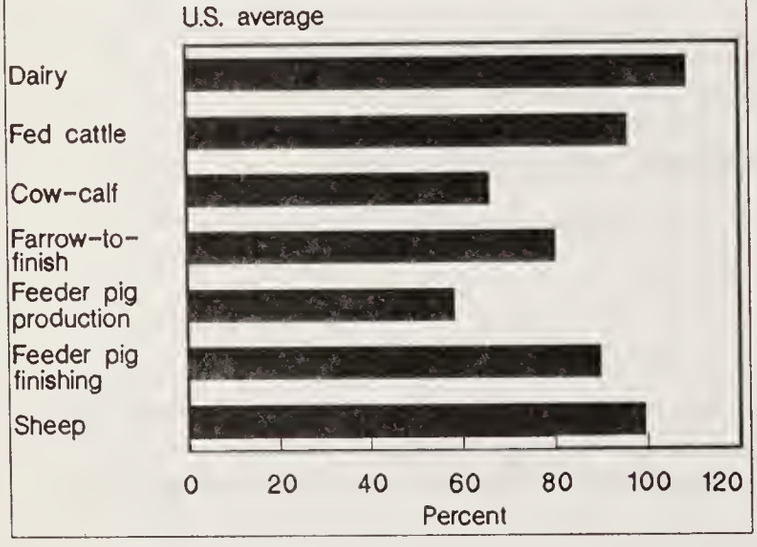
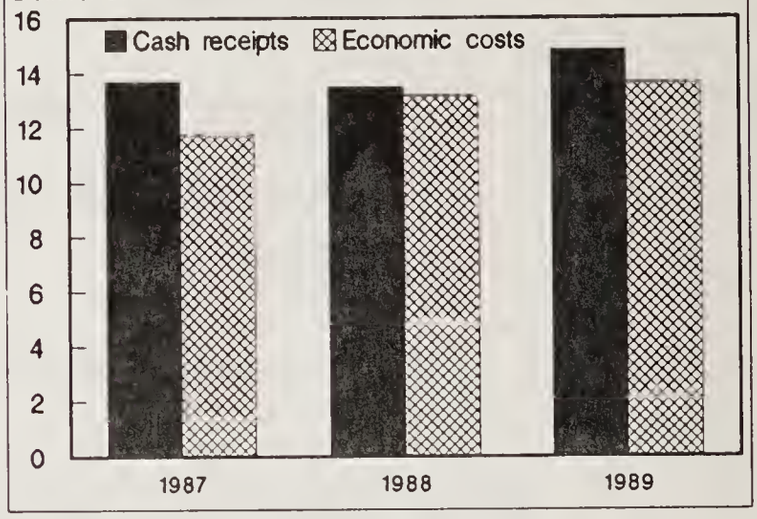


Figure 2
Milk production costs and returns, 1987-89



of returns are below the levels of the late 1970's and 1980's. Figure 2 shows that the drop in cash receipts in 1988, accompanied by increased costs, squeezed the margin (residual returns to management and risk) very tightly, but the increased cash receipts widened this margin in 1989.

The Upper Midwest showed the greatest rise in cash receipts, $1.54 per cwt of milk (11.6 percent), followed by the Northeast and Pacific, $1.40 and $1.39 per cwt, respectively. The Southeast, where the milk price is typically well above other regions, showed the smallest increase, 82 cents per cwt (5.1 percent).

Feed costs rose in most regions. The Pacific had the largest increase in total feed costs, 72 cents per cwt of milk (11 percent), because of its heavier reliance on purchased feed. The Southeast saw the largest increase in concentrate costs, 68 cents per cwt of milk, because it also relies on purchased concentrates from outside the region. Extremely wet conditions in early 1989 in the Northeast contributed to the rise in feed costs. The Upper Midwest was the only region to show a decline in feed costs. Although concentrate costs climbed, the Upper Midwest's forage costs dropped substantially due to much better weather conditions in 1989. Total cash expenses plus capital replacement rose between 1.7 percent (Corn Belt) and 8.4 percent (Pacific). The Upper Midwest posted a very slight drop in total cash expenses and capital replacement. The combined effect of lower expenses and higher cash receipts in the Upper Midwest resulted in the largest increase in net cash returns among the regions. Net cash returns in the Upper Midwest were $1.56 per cwt above 1988 returns. The Corn Belt showed the second largest increase in net cash returns, 95 cents per cwt. The Southeast showed the smallest improvement in net cash returns. The remaining regions registered between 2- and 51-percent increases in net cash returns.

Figure 3 catalogues total milk production costs for the seven USDA milk-producing regions and the U.S. average as defined by USDA. The regions relying more heavily on homegrown feeds, such as the Upper Midwest and Northeast, had the lowest variable costs while the Southeast and Pacific, which rely more on purchased feeds, paid higher variable costs. The Pacific had the lowest economic costs due to lower overhead and fixed costs and less use of unpaid labor, offshoots of production practices in a temperate climate. Higher fixed and capital costs in regions like the Upper Midwest, Northeast, Corn Belt, and Appalachia are accrued from crop production machinery used for the production of feed as opposed to regions where a larger portion of feed is purchased. More substantial housing for the cows because of harsher weather, and less intensive use of milking facilities, added to the fixed costs of these regions compared with the Pacific, Southeast, and Southern Plains.

Operators who rely on homegrown feeds are more sensitive to poor weather conditions, while those who depend on purchased feeds are more affected by fluctuations in feed prices. The 2 years, 1988 and 1989, demonstrate the difference that production practices make in determining how "shocks" such as a drought can affect costs. The 1988 drought led to the largest cost increases in the Midwest, where most of the feed was homegrown. Feed grain producers have not only had very low yields, requiring them to purchase supplemental feed at higher prices, but they also incurred the cost of maintaining crop machinery and the inputs for growing feed. Producers who rely mostly on purchased feed faced higher prices but did not have to carry the costs of machinery for crop production. The Pacific, especially California, normally enjoys favorable weather conditions and crops are typically irrigated, reducing at least part of a drought's impacts. However, in 1989, with better weather conditions in other parts of the country, especially the Upper Midwest, yields improved, making onfarm homegrown feed economical. Since supplies of forage and feed grains remained tight, costs continued to climb for purchasers of feed.

Fed Cattle--Fed cattle production costs rose slightly in 1989 (fig. 4). Variable cash expenses increased $2.31 to $71.47 per cwt. Net cash returns to fed cattle operators climbed a bit. Higher prices for slaughter steers and heifers pushed cash receipts to a record high, $73.76 per cwt, but not enough to cover total cash expenses. Feeder cattle and feed expenses were 92 percent of total cash receipts in 1989, and other variable expenses, fixed expenses, and capital replacement amounted to 19 percent of total cash receipts. Net cash returns dropped because total cash expenses and capital replacement were 110 percent of cash receipts. As a result, total cash expenses and capital replacement exceeded total cash receipts by $7.62 per cwt.

Feed expenses declined 57 cents per cwt for farmer feedlots. Lower forage expenses were offset by higher prices of grain, protein supplements, and hay. Feed expenses were $5.57 per cwt higher than for commercial feedlots. Unlike commercial feedlots, farmer feedlots fattened calves instead of yearlings. Farmer feedlots used a larger volume of feed and kept feeder cattle for a longer time to reach slaughter weights. Net cash returns to farmer feedlots improved slightly in 1989. Total economic costs increased from $88.23 per cwt to $91.29.

Figure 3
Total milk production costs, by region, 1989

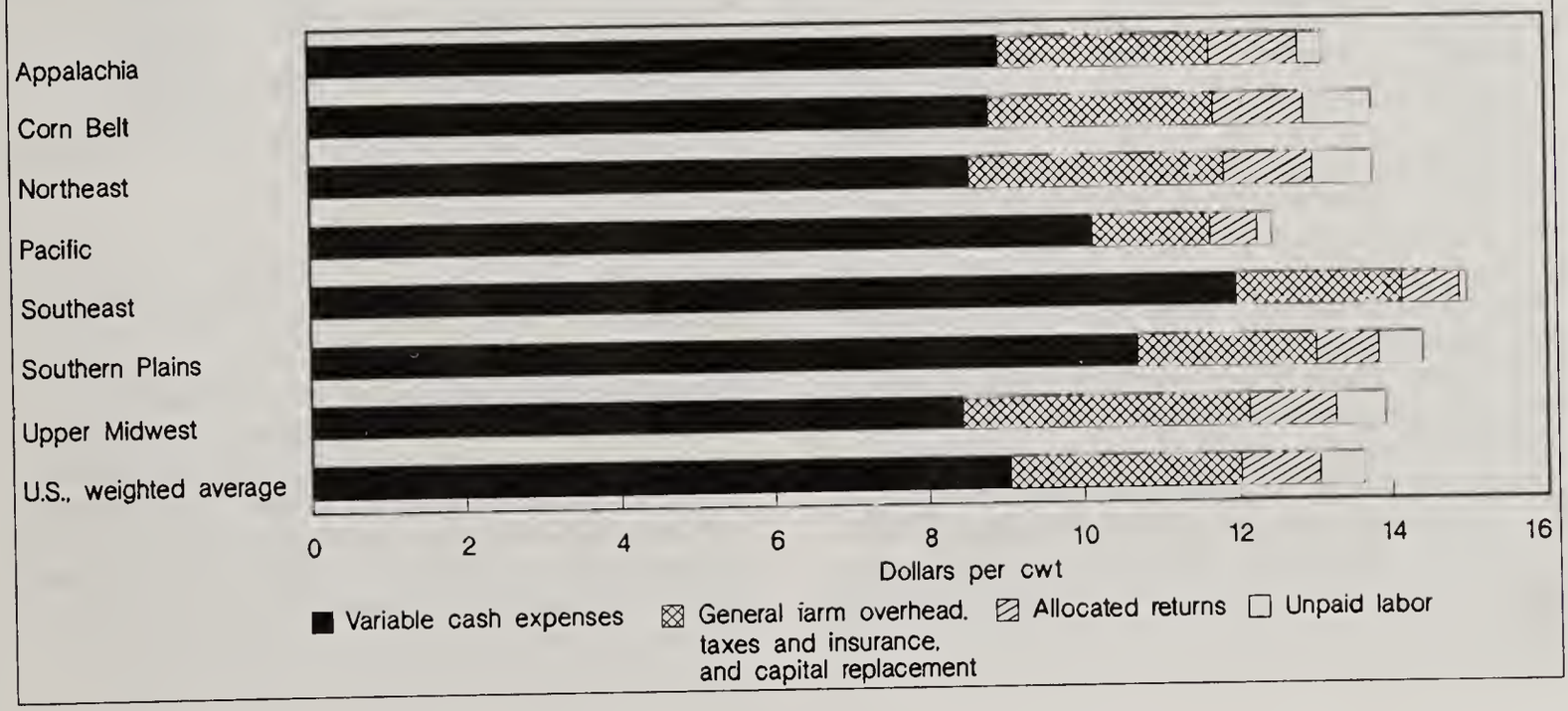
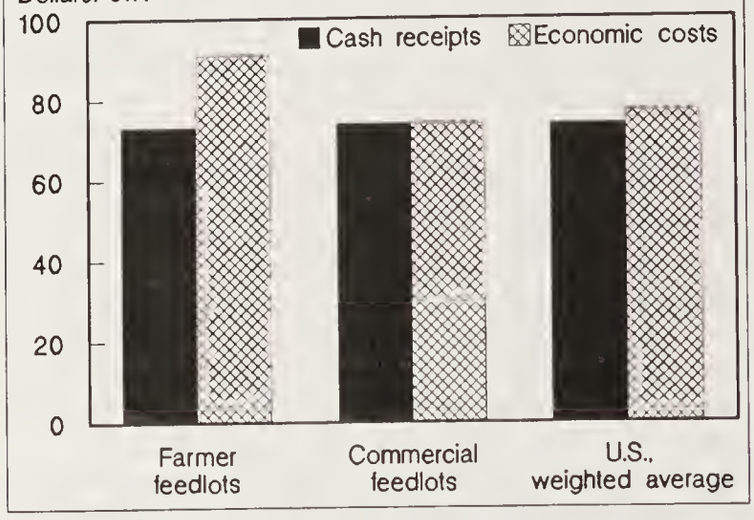


Figure 4
Fed cattle production costs and returns, by type of producer, 1989



Residual returns to management and risk were minus $18.18, a slight improvement from 1988.

Commercial feedlots paid higher expenses for feeder cattle, feed, and other inputs and received higher returns for their products than farmer feedlots. The impact of the drought and lower stocks of feed grains boosted feed prices in 1989. Cash receipts in commercial feedlots failed to cover either total cash expenses or total economic costs. Net cash returns and residual returns to risk and management both increased slightly in 1989.

Cow-Calf--Net cash returns to cow-calf operators continued to improve because of higher cattle prices and lower feed expenses. Higher prices for yearlings and feeder calves increased cash receipts to their highest level in history, $369.79 per cow (fig. 5). For only the fourth time in 18 years, the difference between cash receipts and total cash expenses was positive, following 5 years of negative returns.

On average, feed costs declined $6.20 per cow nationally and more than $14 per cow in the North-Central region. Expenses for feed grains and protein supplements increased even more in the drought aftermath. Forage costs accounted for 72 percent of total feed costs. Improved pasture conditions and increased yield of homegrown feed in 1989 reduced cow-calf producers' dependence on purchased feed. Forage expenses declined enough to offset the higher prices of grain and concentrates, reducing national average feed costs by more than $6 per cow. Figure 5 compares the cash receipts and economic costs by size of operation and region. Economies of size and more efficient use of feed made large operations less exposed to feed price changes. Medium and large operations had lower fixed expenses and capital replacement compared with smaller operations. Smaller operations' (fewer than 100 head) cash receipts could cover only cash expenses, while, for larger operations (100 head and over), cash receipts covered both cash expenses and capital replacement. Net cash returns to cow-calf production increased as the size of operation increased. The difference between cash receipts and cash expenses plus capital replacement ranged from minus $20.43 per head for operations with fewer than 100 head to $32.97 per head for operations with more than 500 head. Operations with 100-499 head had returns of $8.72 per cow.

Cow-calf production costs varied from region to region. Feed, labor, fixed expenses, and capital replacement expenses and type of output, as well as size of operation, influence the relative returns across the regions. Net cash returns in the South and North-Central regions were minus $73.21 and minus $12.93 per cow, and in the Great Plains and West, $22.31 and $19.52 per cow, respectively. Total cash receipts ranged from $387.95 per cow in the West to $311.83 in the South. Cow-calf producers in the South sold more calves than feeder stock due to less availability of forage in the spring. The South had the highest feed expenses and capital replacement expenses and the North-Central region had the highest fixed expenses in 1989.

Hogs--For 2 consecutive years, hog producers have posted negative returns, and 1989 was the worst year of the past 18 years for U.S. hog producers. Hog prices remained low relative to 1987 while grain prices increased. Net cash receipts declined to a record low. Cash receipts to hog producers were too low to cover total cash expenses and, for some operators, did not even cover variable expenses. Feeder pig producers saw the lowest cash returns, minus $25.74 per cwt, followed by farrow-to-finish operations, minus $7.53 per cwt. In contrast to cow-calf and farmer feedlots operators, feed costs increased for hog producers due to higher prices of grains and less use of homegrown feed. Hog producers paid more for feed than in 1988. Feeder pig producers and farrow-to-finish operators paid the highest feed costs, followed by feeder pig finishing operators. Economies of size heavily influence hog costs of production, especially for farrow-to-finish and feeder pig producers. Total cash costs are inversely related to the size of hog operations, the difference in the total cash expenses for operations with 10,000 and 140 head was $4 per cwt for farrow-to-finish and $8 per cwt for feeder pig production in 1989.

Farrow-to-Finish--Cash receipts increased 77 cents per cwt due to the 2-percent increase in slaughter hog prices. Feed expenses rose $1.09 per cwt, mostly due to higher prices of grain, and other input expenses increased 83 cents per cwt. Total cash expenses rose $1.92 per cwt and total economic costs increased $2.90 per cwt. Economies of size lowered total cash expenses but not enough to offer positive net cash returns for large operators (fig. 6). All sizes of operations and both the North-Central region and Southeast failed to recover total cash expenses. The smallest producers (140 head) had the lowest net cash returns, minus $11.23 per cwt, followed by the Southeast, minus $10.44 per cwt. Feed costs rose in all regions. Southeast producers paid the highest feed costs,

Figure 5

Cow-calf production costs and returns, by size of operation and region, 1989

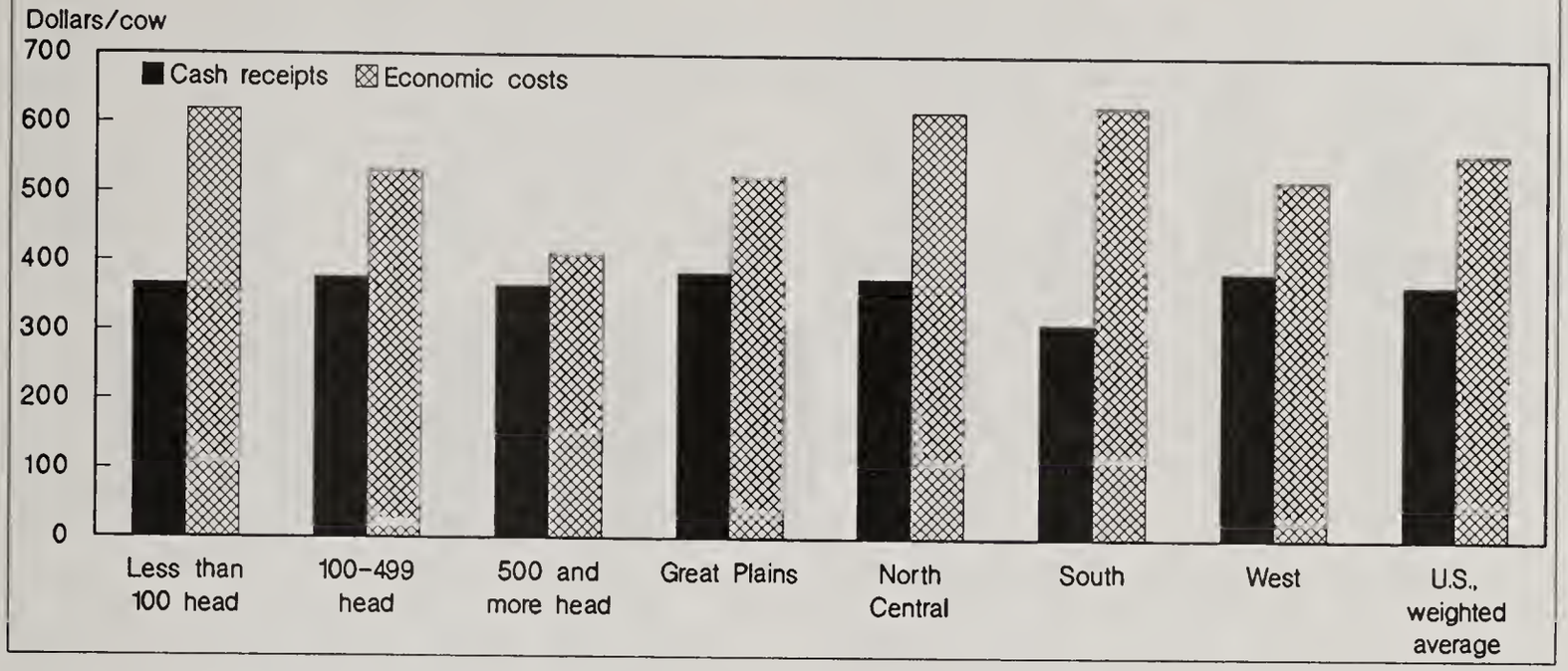
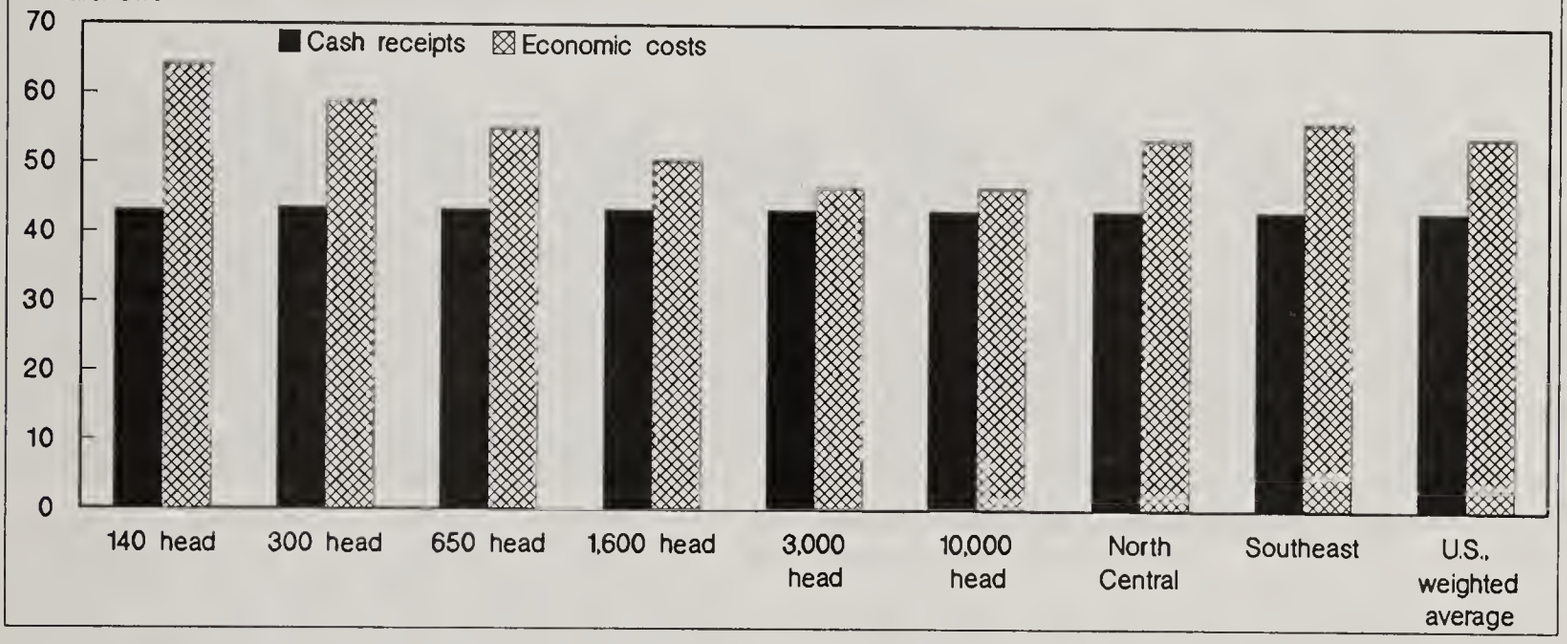


Figure 6

Farrow-to-finish costs and returns, by size of operation and region, 1989



$31.32 per cwt, followed by the 140-head operations, $29.79 per cwt.

Feeder Pig Production--Cash receipts declined $4.63 per cwt due to lower feeder pig prices in 1989. Feed cost increased $1.29 per cwt (3.4 percent) primarily due to higher prices of corn. Total cash expenses rose $2.32 per cwt. Returns to feeder pig producers declined more than for other hog producers due to the use of more feed and lower feeder pig prices. Net cash returns declined to the lowest level, minus $25.74 per cwt. Figure 7 compares the cash receipts and total economic costs for feeder pig producers by size of operation and by region. Cash receipts less total cash costs declined and remained negative in all sizes of operation and in both regions. The small operations (up to 300 head) failed to cover total variable expenses. Other operations (above 300 head) were able to cover only variable expenses. Cash receipts less cash expenses plus capital replacement was higher in the North-Central region than in the Southeast, the two major producing regions.

Figure 7
Feeder pig production costs and returns, by size of operation and region, 1989

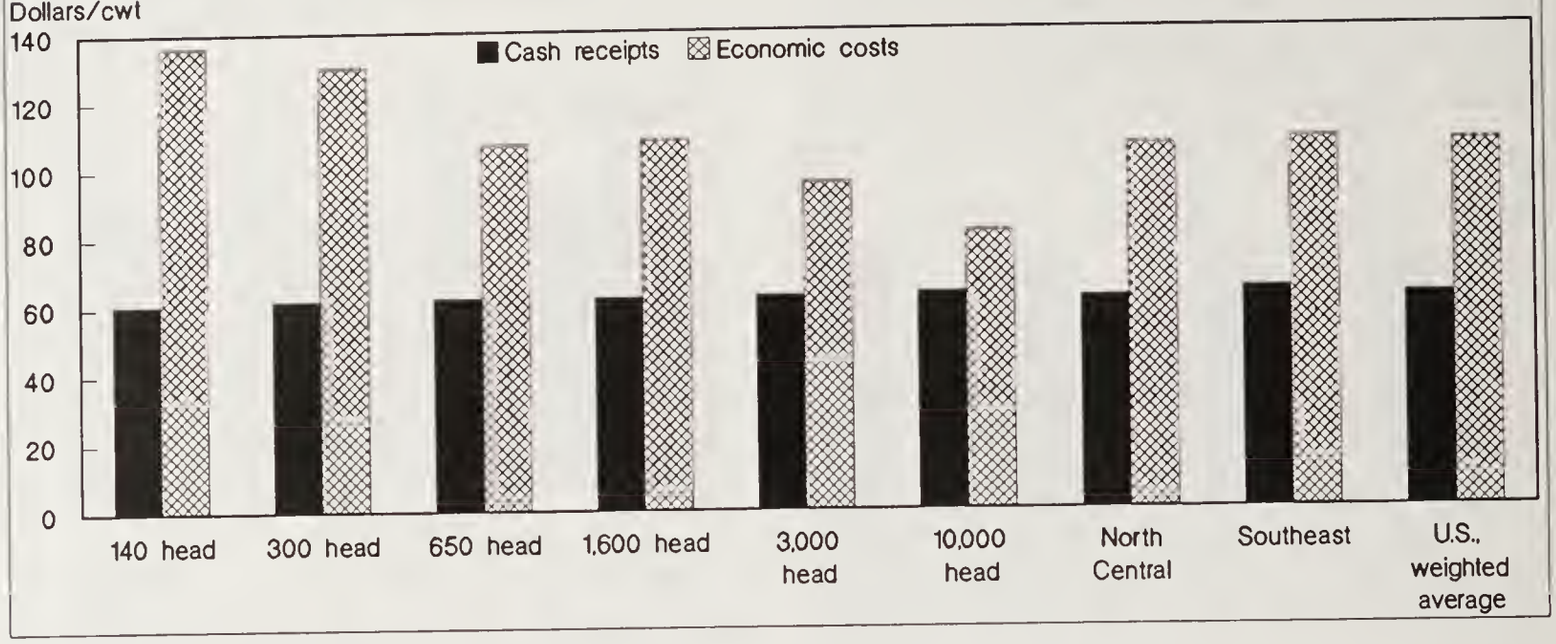
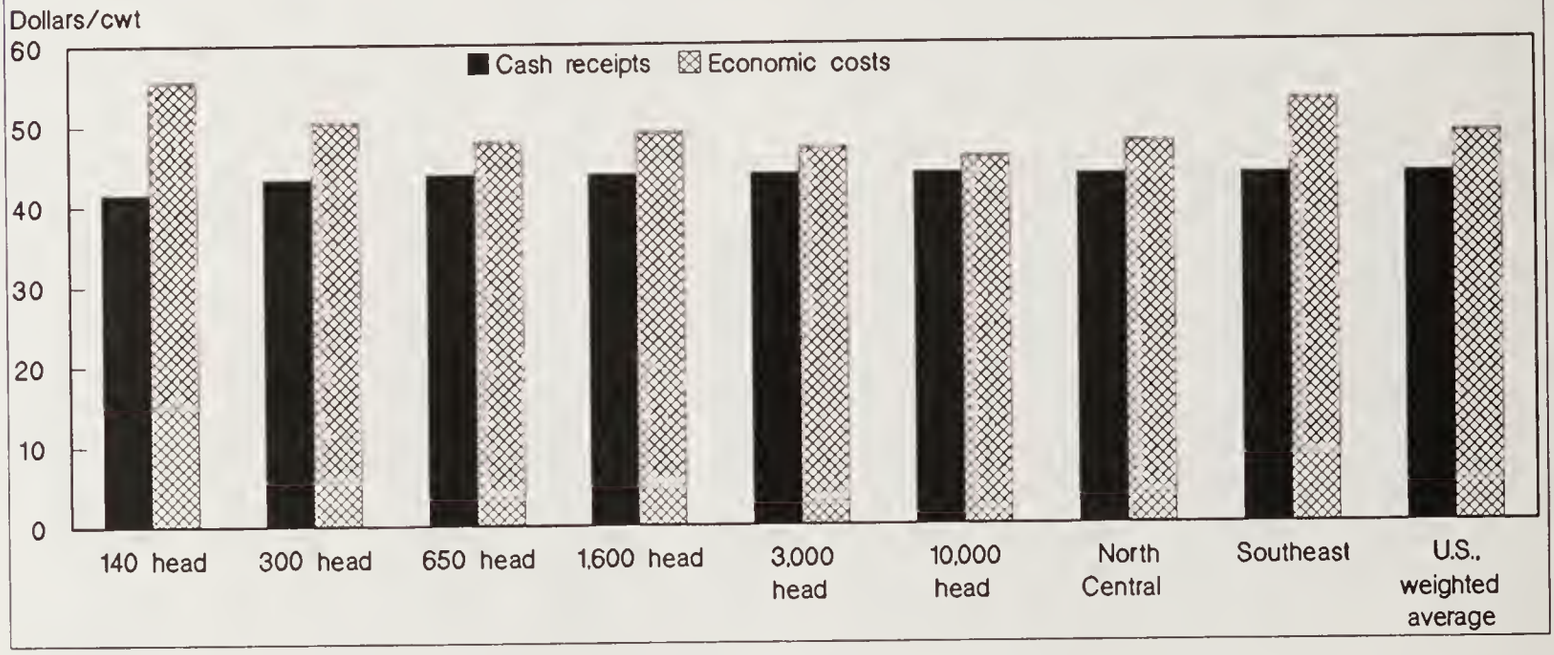


Figure 8
Feeder pig finishing production costs and returns, by size of operation and region, 1989



Feeder Pig Finishing--The 9-percent drop in feeder pig prices coupled with a 1.5-percent increase in slaughter hog prices to help temper the higher prices of feed and other input expenses in 1989. Net cash returns increased for all sizes and all regions. Declines in feeder pig expenses were large enough to offset higher prices of feed and other inputs and lowered total variable expenses. Net cash returns for 10,000-head feeder pig finishing operations were minus $4.19 per cwt and were minus $12.56 for a 140-head operation. Total economic costs exceeded cash receipts for all sizes of operations and in the North-Central region and Southeast (fig. 8). The North-Central region maintained its competitive advantage in feeder pig finishing with net cash returns of minus $5.39 per cwt compared with net returns of minus $10.31 in the Southeast.

Sheep--Cash receipts for sheep production declined $2.13 per ewe due to lower prices of feeder lambs, slaughter lambs, and wool prices. Wool incentive payments and unshorn lamb payments increased in 1989, helping to soften lower prices for lambs and wool. Cash receipts from sheep production were large enough to cover total cash expenses and capital replacement and maintained positive, but lower, net cash returns.

Net cash receipts for sheep producers continued to decline but remained positive, unlike receipts for cattle and hog production. The combined effect of higher variable and fixed expenses and lower cash receipts resulted in a $3.28-per- ewe decline in net cash receipts. Net cash receipts for sheep producers declined from a peak of $25.12 per ewe in 1987 to $14.51 per ewe in 1989. Residual returns to risk and management declined from $4.61 per ewe in 1988 to minus 43 cents per ewe following 4 years of positive returns.

Time Series Data

The procedures, methodology, and format used by USDA to report crop, livestock, and milk production costs have changed significantly since 1974 when ERS was given this responsibility. This report presents a consistent set of costs and returns estimates for U.S. livestock and dairy production for 1972-89. Tables 56-62 show the costs of producing livestock and milk for 1972-86. The report's one set of time series data tracks changes in the cost structure of the livestock and dairy industry over time. Total economic costs for cattle, hogs, sheep, and milk production ranged from 64 percent to 169 percent higher in 1989 than in 1972 (figs. 9-15). Milk production is the only enterprise for which cash receipts were more than 100 percent of total economic costs for the entire 18-year time period. Cow-calf cash receipts averaged the lowest percentage of economic costs, 60 percent, of all livestock enterprises. Sheep production showed the largest variation in this measure, ranging from 74 percent in 1974 to 124 percent in 1987.

Milk--Residual returns to management and risk averaged $1.42 during 1972-89. Residual returns peaked in 1979 at $2.35 per cwt and bottomed out in 1988 at 30 cents per cwt. Cash receipts as a percentage of total economic costs for the 18-year period ranged from 102 to 122 percent and averaged 113 percent. Feed costs averaged 52 percent of total cash costs and 33 percent of total economic costs during 1972-89.

Fed cattle--Cash receipts were at their highest in 1989 and at their lowest in 1972. Net cash returns, however, were the highest in 1978, $3.65 per cwt, and the lowest in 1981, minus $9.04. Net cash returns averaged minus $4.46.

Cow-calf--Net cash returns averaged minus $33.57 per cow during 1972-89. Cash receipts exceeded total cash expenses plus capital replacement only four times in 1973 and in 1978-80. Cash receipts averaged 60 percent of total economic costs, peaking at 86 percent in 1979. On average, the residual return to management and risk of cow-calf operations was minus $163.86. In contrast to dairy enterprises, cash receipts for cow-calf producers were less than 100 percent of total economic costs for the entire 18-year period.

Farrow-to-finish--Net cash returns to farrow-to-finish operations were the lowest in 1989, minus $7.53, and the highest in 1987, $10.60 per cwt. Residual returns to management and risk of farrow-to-finish operations averaged minus $1.50 per cwt, the highest of all hog enterprises. Cash receipts averaged 97 percent of total economic costs, peaking in 1987 at 119 percent, and in both cases the highest of all hog enterprises.

Feeder pig production--Net cash returns were positive half of the time between 1972 and 1989, yet they averaged minus $2.81 per cwt. In 1989, feeder pig production cash receipts were the lowest percentage of total economic costs, 58 percent, which was the lowest level in the time period for any of the hog enterprises. Residual returns to management and risk averaged minus $15.41 per cwt.

Feeder pig finishing--Net cash returns were negative for 17 of the years during 1972-89, rising only in 1987 to $2.76 per cwt. Feeder pig finishing fared slightly worse than feeder pig production. Net cash returns averaged $2.74 per cwt below feeder pig production returns. However, the residual returns to management and risk were $11.83 per cwt more favorable for feeder pig finishing operations than feeder pig production operations.

Sheep--Net cash returns to sheep production peaked in 1987 at $25.12 per ewe and were the lowest in 1974, at $1.26 per ewe and averaged $10.02 per ewe over the 18-year period. Cash receipts also peaked in 1987 but were the lowest in 1972. Total cash receipts averaged 94 percent of total economic costs, and the highest ratio, 124 percent, was the highest of all enterprises.

Structure of Accounts, Data Sources and Estimation, and Costs-and-Returns Measures

ERS relies on periodic producer surveys to obtain technical data from which the enterprise budgets for specific commodities are constructed.

Primary Data

Structural data (such as herd size; expenses for selected livestock inputs; types and quantities of feed, housing, equipment for handling feed and manure, and storage structures for feed and manure) are obtained from livestock producers. The technical data used as the basis for the livestock budgets come from the Farm Costs and Returns Surveys (FCRS). The FCRS, begun in 1984, is conducted jointly by ERS and the National Agricultural Statistics Service (NASS) and consists of personal interviews of farm and ranch operators which furnish information on income, expenses, and production practices. The expense of data collection prohibits

Figure 9
Economic costs of milk production, 1972-89

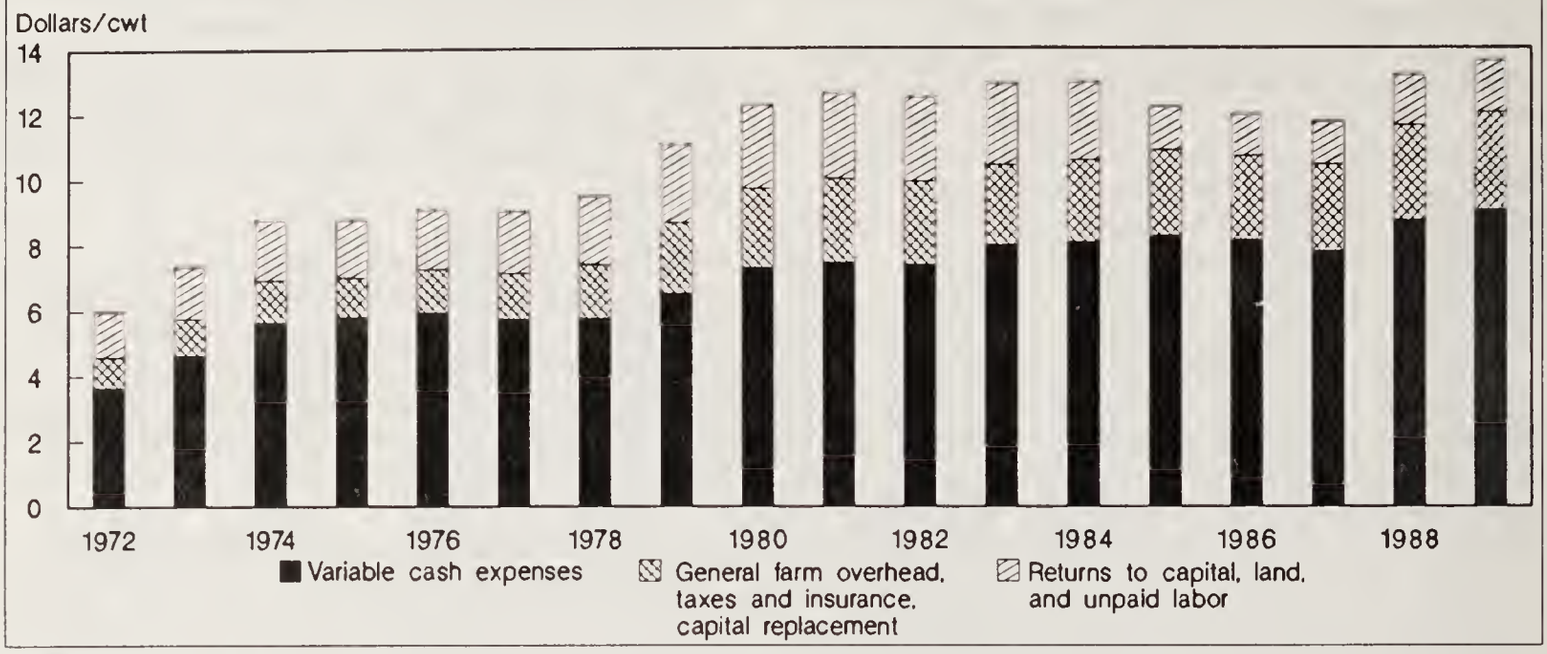
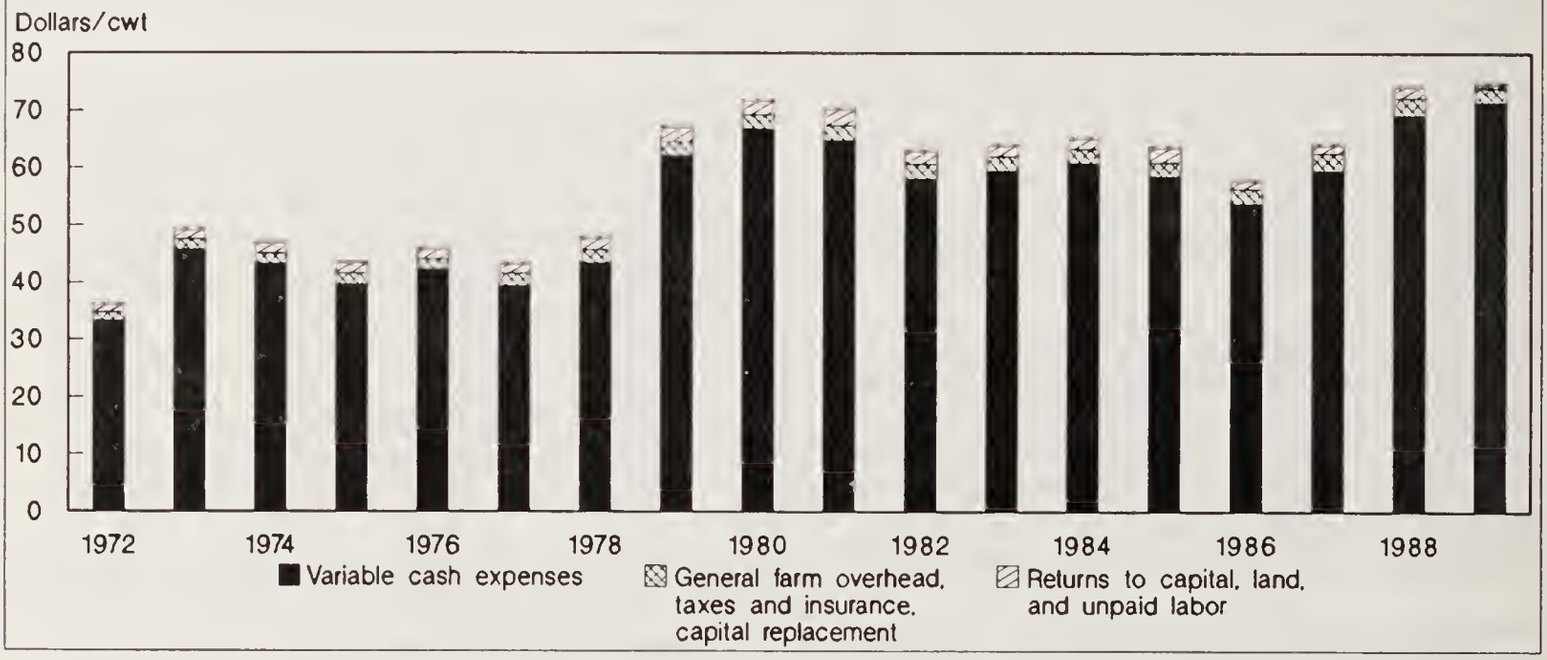


Figure 10
Economic costs of fed cattle production, 1972-89



every type of livestock enterprise from being surveyed every year, thus each enterprise is generally surveyed on a 4-year rotating basis.

Prior to 1984, the primary survey of costs of production was the Costs of Production Survey (COPS), also conducted by USDA. USDA first drew the COPS samples from nonrandom lists of producers who had responded to other acreage and production surveys, based on probability proportional to size. The different sampling schemes between the COPS and the FCRS may have some effect on the data used in the underlying production budgets. For example, the 1985 dairy version of the FCRS was more representative of all producers and was less skewed toward larger farms than was the 1979 survey. As a result, the 1985 average herd size and output per cow was less than reported in 1979, contrary to the industry trend. New FCRS data for costs of production will be incorporated into future estimates. The 1987-89 budgets in this report are based on 1980 surveys of production practices for fed cattle, cow-calf, hogs, sheep, and dairy budgets are derived from a 1985 survey.

The FCRS is a multiframe stratified survey composed of list and area frames. The list frame is made up of farms known to have previously produced a commodity, stratified by size of enterprise. In the year that a particular livestock enterprise was surveyed for production practices, the entire COP sample for that enterprise was in a list frame from which the sample

Figure 11
Economic costs of cow-calf production, 1972-89

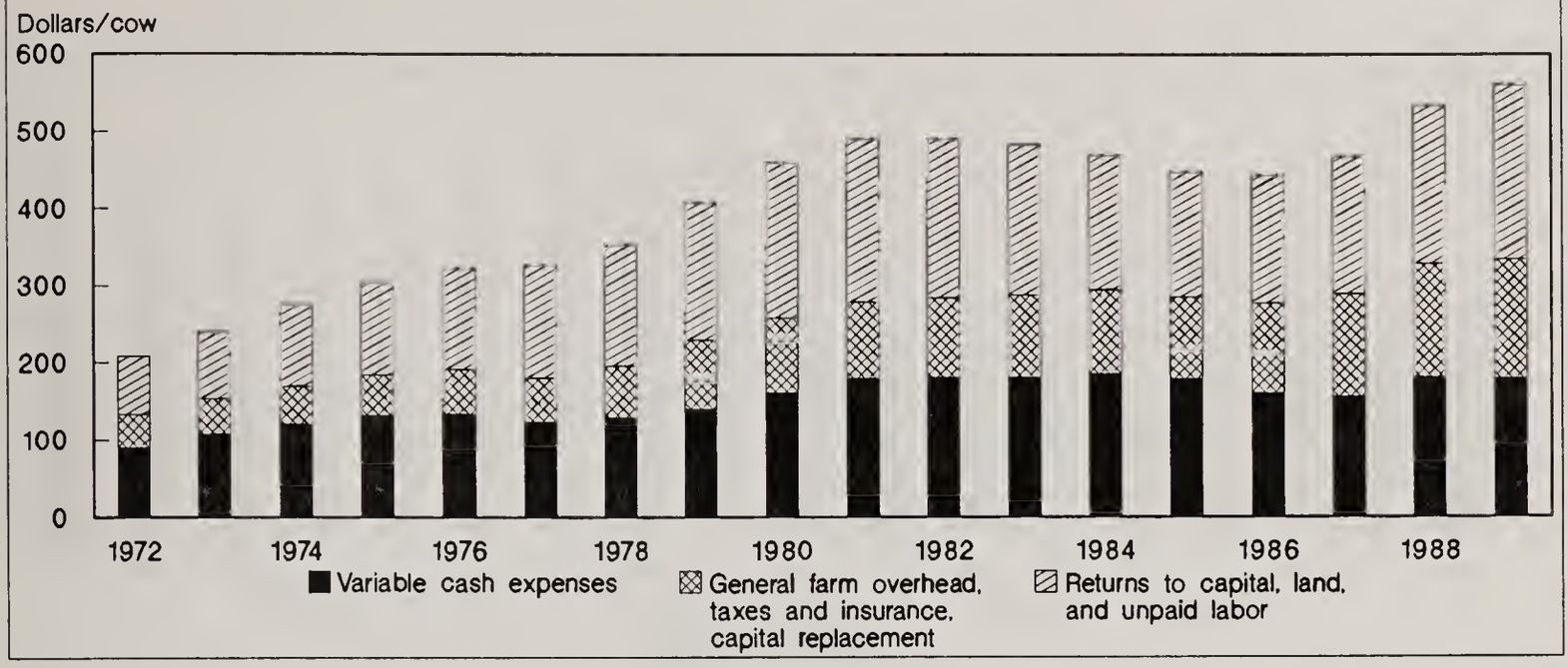
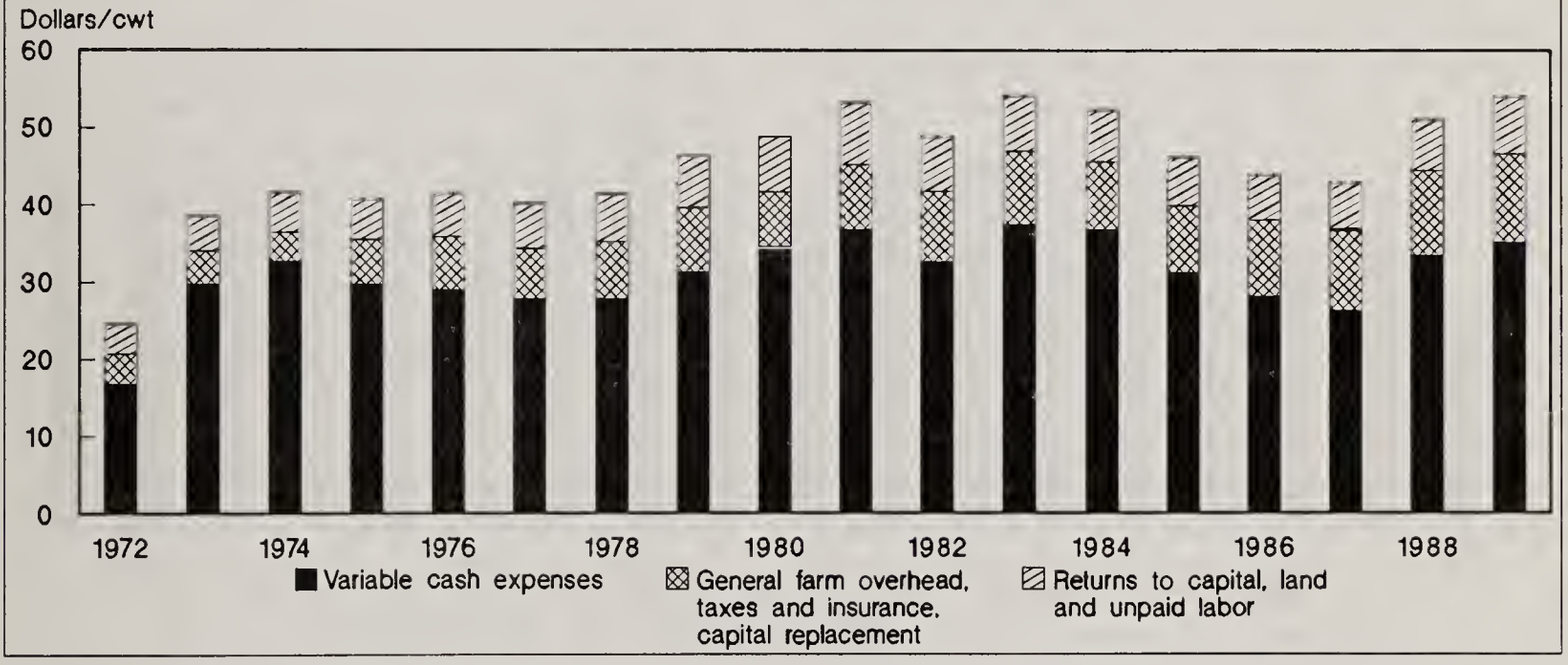


Figure 12
Economic costs of farrow-to-finish production, 1972-89



was randomly drawn. Each questionnaire or observation represents a number of similar farms, the particular number being the survey expansion factor, which is the inverse of the probability of the observation being selected in the sample. The FCRS is conducted during February and March, and the acquired data pertain to production in the previous year.

Between survey years, the budgets are updated by secondary price and quantity data, most often from NASS. The dairy budgets from 1972-84 are based on technical data from the 1979 dairy COPS, while the dairy 1985-89 budgets are based on technical data from the 1985 FCRS. The other livestock enterprise budgets for 1973-80 are based on 1976 COPS technical data, and the budgets for 1981-89 are based on the 1980 COPS.

Secondary Data

The base technical data are supplemented with price and quantity data available from other surveys conducted by ERS and NASS. These additional data include livestock prices, milk prices, milk yield, milk cow and livestock numbers, land values, wage rates, price and quantity data for dairy and livestock feeds, and prices paid for other agricultural inputs. These secondary data are also used to update the costs-and-returns budgets between survey years.

Figure 13
Economic costs of feeder pig production, 1972-89

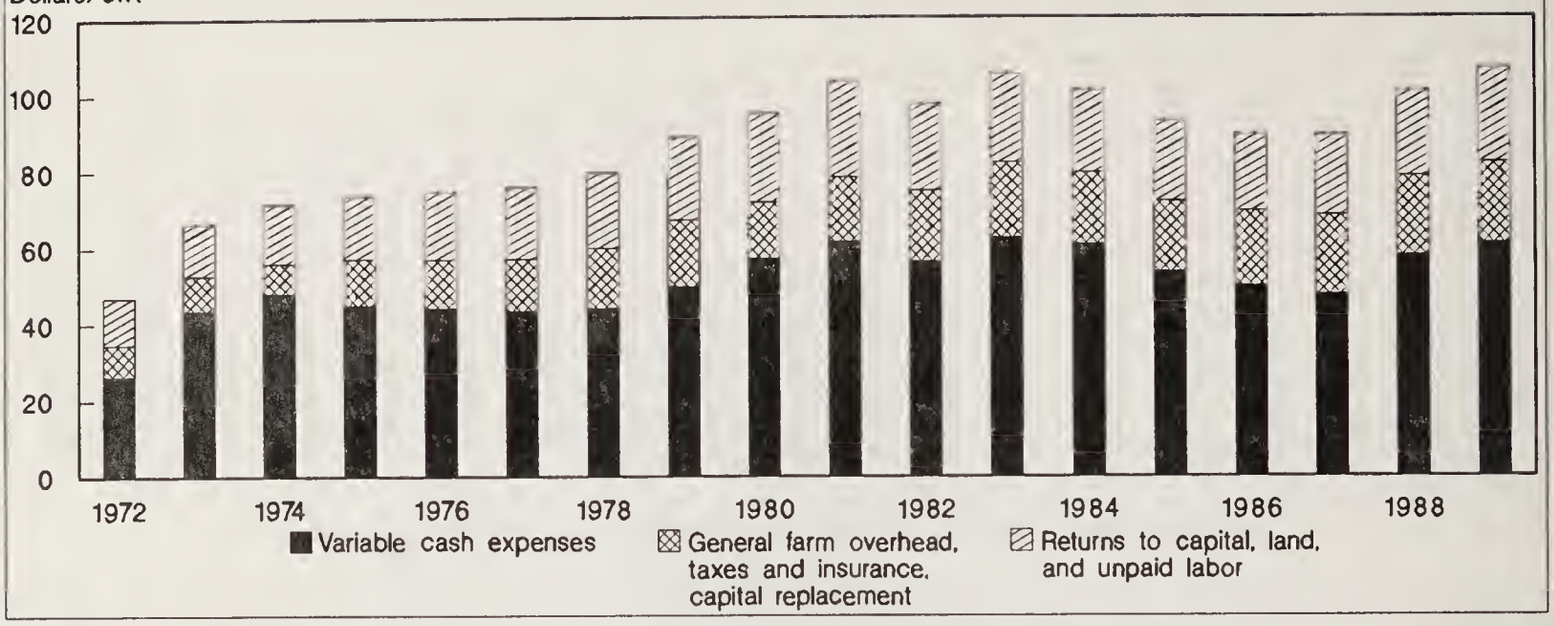
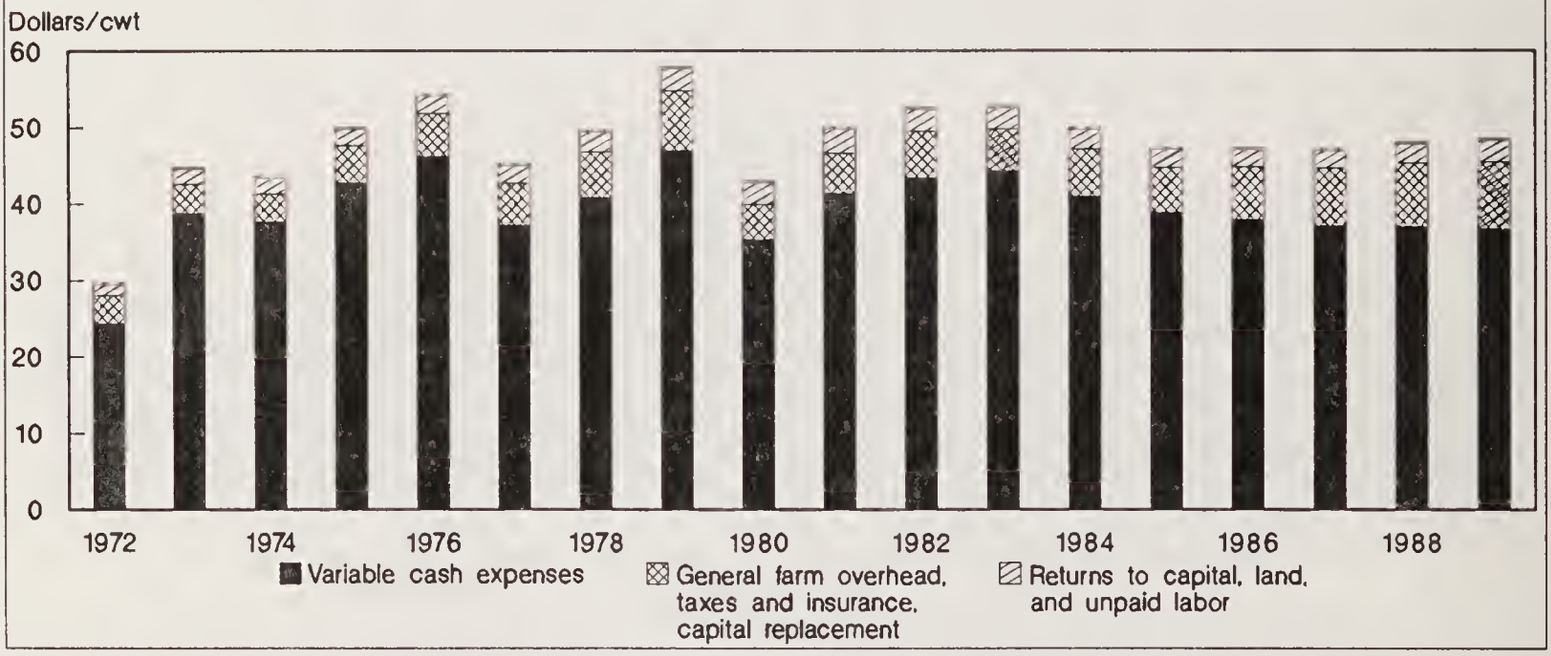


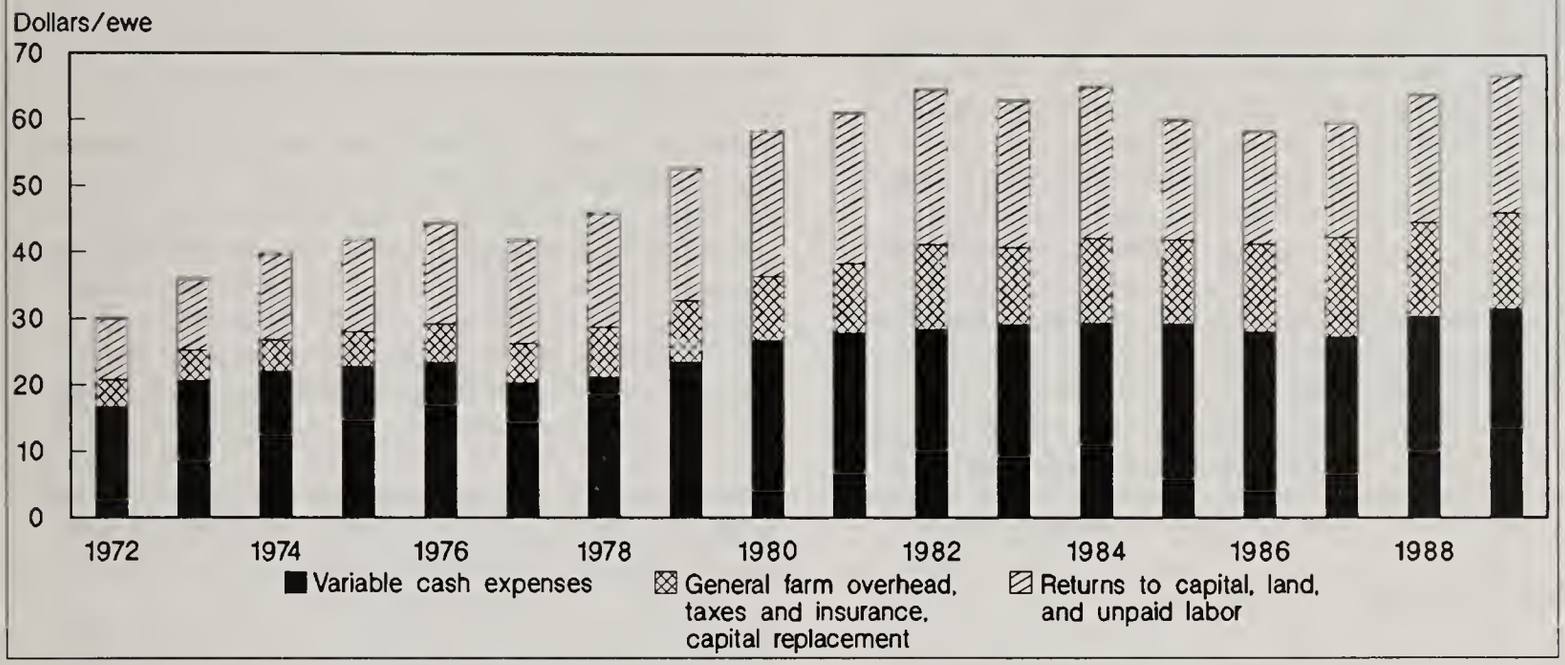
Figure 14
Economic costs of feeder pig finishing, 1972-89



The procedure for calculating the cost of owning and operating machinery and equipment is complex. Every operation has a different age and size distribution and different numbers and types of machinery and equipment items. Most operations have more than one enterprise. Allocation of machinery and equipment costs for an enterprise budget should reflect only the machinery and equipment use of that enterprise. The numbers, sizes, hours of use, type of fuel used, age, total hours of annual use for the enterprise, and types of machinery and equipment used for specific enterprises come from FCRS data. ERS specifies the length of life, list prices, and purchase prices. Prices are updated annually by prices paid indexes for certain farm machinery reported by NASS in *Agricultural Prices*.

Engineering relationships, developed by the American Society of Agricultural Engineers (ASAE), are programmed into a computerized budget generator and estimate machinery costs on a per-hour basis. These equations estimate expenses for fuel, lubrication, electricity, repairs, taxes, insurance, and machinery replacement costs according to the number, type, and hours of use described in the survey data for the equipment and machinery.

Figure 15
Economic costs of sheep production, 1972-89



Enterprise Budgets

ERS prepares and presents costs-of-production data in the form of an enterprise budget, which is a summary of all costs and returns associated with the production of livestock or milk. The budgets indicate costs associated only with the specific enterprise and exclude costs and returns generated by all other enterprises on the farm. For example, many operations grow feed for their livestock. The budgets reflect costs associated with producing the feed that is actually used in producing milk and/or meat, excluding both the costs and returns from homegrown feed not used in the dairy and livestock enterprises.

The budgets are estimated on a per-head basis and on a per-cwt of milk or meat basis. State enterprise budgets are weighted by the number of head of the livestock type in the State and aggregated into regional and national average costs and returns. Each enterprise budget contains cost and returns measures separated into three major categories: gross value of production, cash expenses, and economic costs.

Cash Receipts

Including the cash receipts puts costs in perspective. A given level of costs could be associated with a high or low level of net returns, depending on the value of the livestock product(s). Reporting only costs or just the cash receipts gives just half the picture. The cash receipts within the calendar year is included whether or not cash payment was actually received in the same calendar year the livestock product was produced. For example, the cash payment for milk produced in December is often received in January of the following year. The term "gross value of production" was used in 1987 and 1988 for consistency with the crop cost of production budget format (where "cash receipts" is relatively inaccurate). The livestock costs of production has returned to the more easily understood term, cash receipts, since the estimates are now published separately. The value of both the primary and the secondary or joint livestock products, that is, cull and surplus stock and/or wool, are included. Although these products are easily identified, their production costs are not easily distinguished. Especially difficult is determining whether certain inputs, such as feed or housing, are for the production of the primary or secondary product. So, a budget for the complete livestock enterprise is estimated rather than singling out the production costs of a product.

Except for wool incentive and unshorn lamb payments, direct Government payments are excluded from the cash receipts. The effects of Government programs on milk and meat prices, however, are reflected in the market prices. The Government supports the milk price through direct market intervention by Commodity Credit Corporation (CCC) purchases of manufactured dairy products. The Government also intervenes in the markets for milk and meat by limiting the quantity of milk and meat imports. Thus, the effects of some Government programs are implicitly included in the cash receipts.

The Federal Government assists agricultural producers in emergencies caused by natural disasters. For example, one provision of the emergency feed assistance program (EFAP) provides direct payments for producers facing abnormally high feed expenses. However, because of the lack of data linking these payments to specific enterprises, we do not include the payments in the cash receipts.

Cash receipts are based on product prices and yields. Gains and losses accruing from changes in asset values are not

included. Livestock prices are the prices received in the month that the livestock is sold (or purchased) for the particular type (cows, steers and heifers, calves, barrows and gilts, sows, lambs, sheep, or wool) reported by NASS in *Agricultural Prices*. The byproducts from milk production, cull dairy cows, calves, and replacements, reflect the marketing year average price. The milk price is the average annual price received for milk sold to plants and dealers by producers as reported by NASS in *Agricultural Prices*. The FCRS shows the quantity (and month sold/purchased for beef, hog, and sheep enterprises) of livestock sold in the year production practices are obtained for the particular enterprise and remains constant over survey years. FCRS data also furnish milk sold per cow. However, the quantity of milk sold is updated between survey years by indexing the changes in average milk production per cow reported by NASS in *Milk Production*.

Cash Expenses

Cash expenses per unit of livestock product reflect the minimum break-even prices needed to produce in the short run. Subtracting cash costs from the cash receipts leaves net cash available before replacement of depreciable assets. This measure of returns excludes income taxes and principal payments. (Income taxes and principal payments are not specified in the enterprise budgets.) Returns are also calculated after subtracting a charge for the replacement of machinery, equipment, livestock, and buildings and are termed "net cash returns." Although producers have some discretion as to when to make capital purchases, over the long run, producers must set aside funds to replace equipment, machinery, livestock, and buildings. The gross value less cash expenses and capital replacement charges reflects the cash available for family living expenses, debt retirement, and other discretionary uses.

Variable Cash Expenses

Variable cash expenses are those incurred only when production takes place. For most livestock enterprises, the largest single component of variable expenses is feed. The FCRS furnishes the amounts and types of feed used and how much was grown by the producer for the livestock enterprise. The quantity includes feed fed to both breeding and replacement stock. The feeds are itemized and listed at the head of the variable cash expenses under the subheading "Feed." The full cost of purchased forage and the variable costs of forage production is reported in these line items. The other nonvariable costs (such as taxes and insurance, capital replacement charges, and returns to operating capital, nonland capital, and land) for the crop machinery and cropland associated with homegrown livestock forage production are included in specific line items. The homegrown forage costs are estimated annually from separate forage production budgets. The prices of purchased forages were reported in the FCRS and are updated between survey years by indexing according to changes in hay prices reported by NASS in *Agricultural Prices*.

The concentrates expense includes all purchased and homegrown grains, nutritional supplements, and premixed feeds in the dairy enterprise budgets. Contrary to the treatment of forage costs, all concentrates are valued at market price, as reported by producers for purchased concentrates in the FCRS. The price and quantity of concentrates fed is updated between surveys by indexing according to the change in the quantity fed per cwt of milk and the value of grains and concentrates fed to milk cows, respectively, as reported by NASS in *Milk Production*. The level of feeding also is adjusted by year-to-year changes in output per cow between surveys.

In the other livestock enterprise budgets, the market price for grains, concentrates, and supplements is used. These market prices are adjusted between survey years by indexing according to changes in prices paid for the respective commodity as reported by NASS in *Agricultural Prices*. The quantities of grains and supplements are obtained from the FCRS and are not adjusted between survey years.

Some producers may have been eligible for the Federal Government's drought relief programs. EFAP provided for low-cost grains. However, due to the uneven geographic distribution of program benefits, data were inadequate to reflect the impact of the EFAP assistance on the various enterprise budgets.

The expenses for several other inputs are obtained from FCRS data and are updated between survey years by changes in the following NASS price data. Artificial insemination expenses and Dairy Herd Improvement Association (DHIA) fees reflect 20 percent of the change in the prices paid index for fuels and energy, 30 percent of the change in the prices paid index for autos and trucks, and 50 percent of the change in the wage rate index. Veterinary and medicine expenses reflect 30 percent of the change in the prices paid index for agricultural chemicals and 70 percent of the change in the wage rate index.

Livestock hauling expenses reflect 30 percent of the change in the prices paid index for fuels and energy and 70 percent of the change in the prices paid index for farm and motor supplies. Dairy supplies are based on changes in the prices paid index for items used for production. Hired labor is estimated by multiplying the number of hours obtained from the FCRS times the reported farm labor wage rate plus the employer's share of social security. Hired labor expense for the dairy enterprise was obtained as a total expense per cow and is indexed between survey years by the change in the farm labor wage rate including Social Security. The fees that brokers, cooperatives, handlers, or dealers charge to enable the exchange of livestock products are marketing expenses.

Milk marketing charges per cwt are obtained from the FCRS and are updated by changes in the marketing charges reported by administrators of Federal Milk Marketing Orders. Milk hauling charges are estimated in the same way. Livestock marketing charges are obtained from the FCRS and are updated from the prices paid index for all production items of nonfarm origin. The expense for bedding materials, such as straw, is obtained from the FCRS. Bedding expenses are updated by the price of straw as reported by NASS in *Agricultural Prices.*

Credit for the fertilizer value in manure from fed cattle operations and hog operations is included as an expense because it reduces the cost of fertilizer used in producing feed for these enterprises. The value is estimated by taking the amount of nitrogen, phosphorus, and potassium supplied by the manure from the enterprise and multiplying it by the price of the respective ingredients for the survey year. Between survey years, the value of livestock manure is indexed by the prices paid for fertilizer. The custom feed mixing expense for cow-calf and feeder pig enterprises are taken from the FCRS and are updated by labor and machinery cost indexes.

Shearing and tagging expenses for sheep enterprises are taken from the FCRS and are updated by changes in the wage rate. Ram death loss accounts for the number of rams that need to be replaced to maintain the flock. The quantity is obtained from the FCRS and is valued at the market price for sheep as reported by NASS in *Agricultural Prices.*

The fuel, lube, and electricity expenses for the equipment and machinery specified in the FCRS are calculated by the economic engineering equations developed by the ASAE. Prices for fuels in each State, adjusted for refundable Federal and State excise taxes where necessary, are those reported by NASS in *Agricultural Prices.*

Machinery and building repairs for equipment, machinery, and buildings specified in the FCRS for each enterprise are also estimated by economic engineering equations developed by the ASAE.

Fixed Cash Expenses

General farm overhead, taxes and insurance, and cash interest paid are items that are relatively fixed in the short run, regardless of the level of production. Overhead expenses represent actual cash expenses for electricity for general farm use, fees and dues, fence materials and supplies, farm telephones, farm water (not irrigation), water drainage, liability insurance, and general business. Actual interest expenses paid reflects both real estate and nonland loans. These expense items come from the expenditure portion of the FCRS.

Personal property taxes are based on the current value of new machinery, equipment, and buildings lagged to a base year. Land taxes are based on the value of land and the real estate taxes for the particular production area. Lags are based on the average age of equipment, machinery, and buildings from the FCRS data. Insurance expense, however, is based on the current value of these assets. Only taxes on the machinery, equipment, and buildings actually used in the production of the particular enterprise are included.

Capital Replacement

In any year, an operator may defer machinery and equipment purchases depending on the economic conditions facing the operation. To maintain production over the long run, however, timely replacement of capital stock is essential. ERS estimates the costs of machinery, equipment, and breeding livestock at current prices. Thus, capital replacement represents a charge sufficient to maintain production capacity through time. The value of purchased breeding animals depreciates to salvage value. The number of years over which the animal's value depreciates varies by region and species. Livestock used for replacement but raised on the farm do not depreciate because the cost of raising these replacements is included in the budgets. Depreciating raised replacements would be double-counting.

Net Cash Returns

Net cash returns is a new term used for the difference between total cash receipts and total cash expenses plus capital replacement. It represents the cash left over after production expenses that is available for debt repayment, family living expenses, income taxes, and the operator's risk and management. It is not necessarily profit, as income taxes are not taken into account, nor is it a return to owned capital.

Economic (Full Ownership) Costs

This section allows comparison of livestock production costs and returns across varying levels of equity. All assets are assumed to be owned. The cash expense section includes actual cash interest paid, which is heavily dependent on the level of debt, the type of debt, and what the terms are with lending institutions. Therefore, instead of including the actual cash interest expense, the opportunity costs of operating capital, nonland capital, and landownership are imputed. The value of unpaid labor is also imputed. These costs cannot be determined during the production period through market transactions because there are none. The economic cost per unit indicates the average break-even price needed to motivate producers to continue producing in the long run.

The return allocated to operating capital is based on the assumption that the rational producer expects money invested in variable production inputs to earn at least as much as if the money were placed in a savings account or a similar financial instrument. Thus, the 6-month U.S. Treasury bill rate is used.

The rates for 1987, 1988, and 1989 were 6.05, 6.92, and 8.04 percent, respectively.

The annual expected return the average producer might receive from capital invested in the nonland assets used in livestock production is estimated by multiplying a 10-year moving average of the ratio of residual income to assets for the farming sector by the value of the machinery, equipment, and breeding livestock. The value of machinery, buildings, and equipment are lagged from current prices according to their average age to reflect their initial prices. The average age for equipment and permanent structures is obtained from the FCRS.

Livestock, however, is valued at the current year's prices. An operator could expect the capital invested in these inputs to receive an annual return equal to their opportunity costs, exclusive of asset valuation changes because of inflation or deflation. The rate of return must be calculated from earnings from the current production process. Earnings from price appreciation (capital gains) or price depreciation are not included here or in the cash receipts section. The expected rate of return is calculated by taking the average of the previous 10-year total return to production assets in the agricultural sector, subtracting the value of the operator's labor used each year, and dividing by the respective cash receipts assets. All three series appear in *Economic Indicators of the Farm Sector: National Financial Summary*. The calculated rates for 1987 through 1989 are 2.35, 2.73, and 2.98 percent.

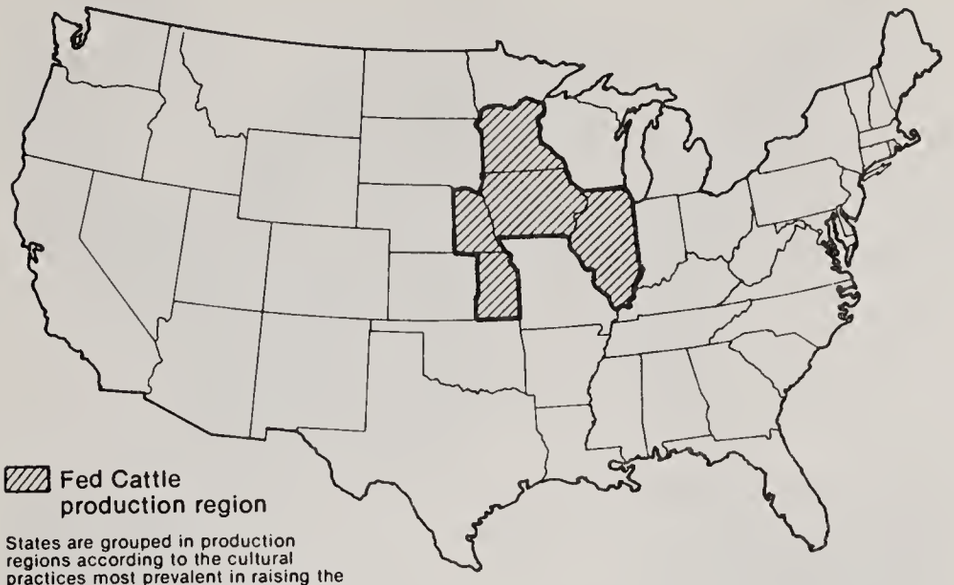
The allocated returns to land is the value of land used for the livestock enterprise (including land for livestock feed production) multiplied by the calculated 10-year rate of return to agricultural assets.

The annual quantity of unpaid labor (operator, family, and other) was reported in the FCRS and is valued at the annual average hourly wage rate for "all hired farmworkers" plus the employer's share of social security taxes. Any additional return reflecting the operator's entrepreneurial skill (or fortune) appears in the residual return to management and risk.

Thus, total economic costs consist of variable cash expenses, general farm overhead, taxes and insurance, capital replacement, and allocated returns to operating capital, nonland capital, land, and unpaid labor. The residual, once total economic costs are subtracted from the cash receipts, is the return to the producer's management and risk. The returns to management and risk should be evaluated in light of the given allocation of returns to owned inputs and are directly comparable across livestock enterprises since the same procedures are used. In the long run, the return to risk is expected to average near zero, although in any year, the residual return to risk could be positive or negative depending on weather and supply and demand factors. Returns to management is not typically determined by a set rate, so the actual level is quite obscure, but it should be greater than zero. Therefore, the average residual returns to both management and risk should be positive.

Figure 16

Fed Cattle Production Region

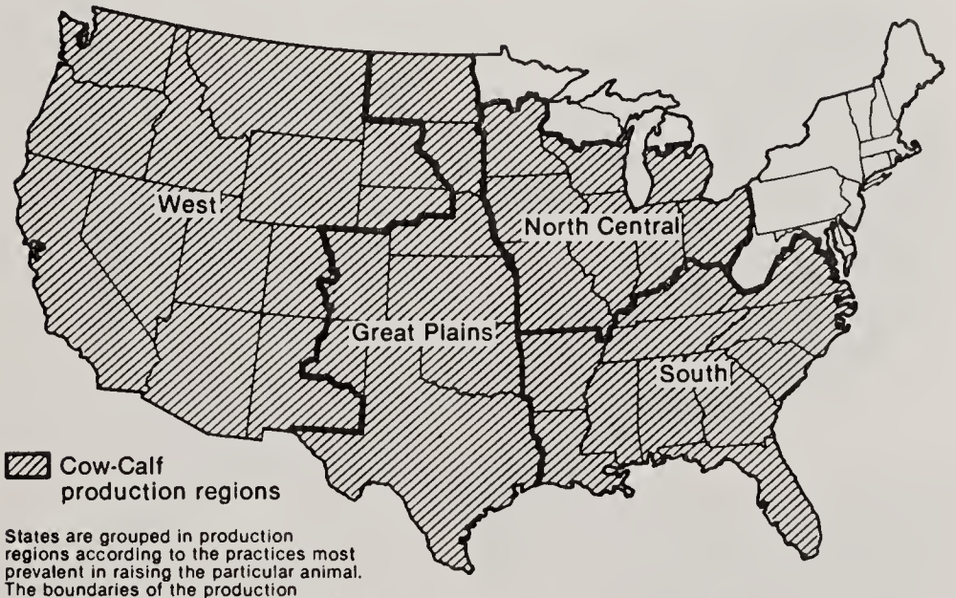


Fed Cattle production region

States are grouped in production regions according to the cultural practices most prevalent in raising the particular crop. The boundaries of the production regions for one enterprise, therefore, are not necessarily the same as those for another enterprise.

Figure 17

Cow-Calf Production Regions

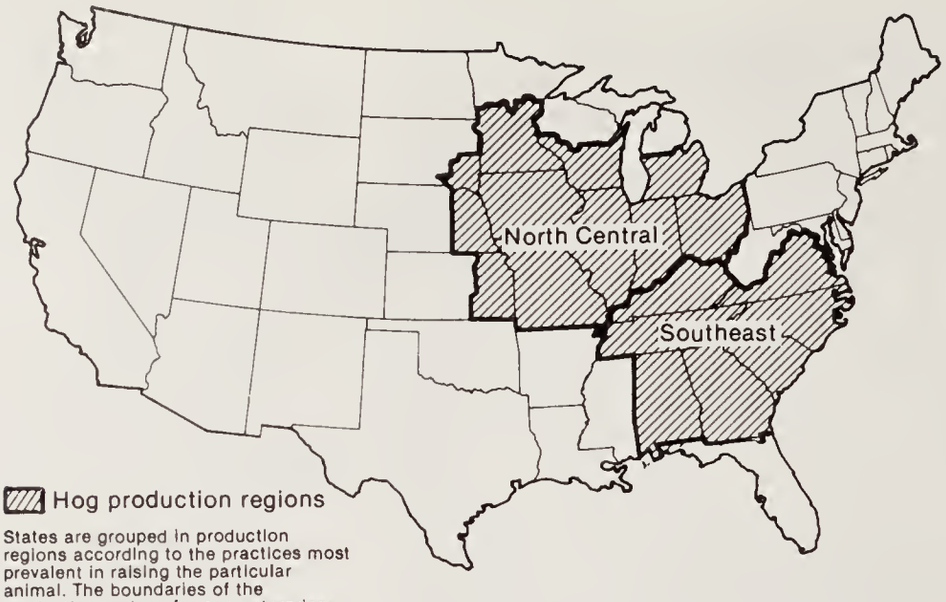


Cow-Calf production regions

States are grouped in production regions according to the practices most prevalent in raising the particular animal. The boundaries of the production regions for one enterprise, therefore, are not necessarily the same as those for another enterprise.

Figure 18

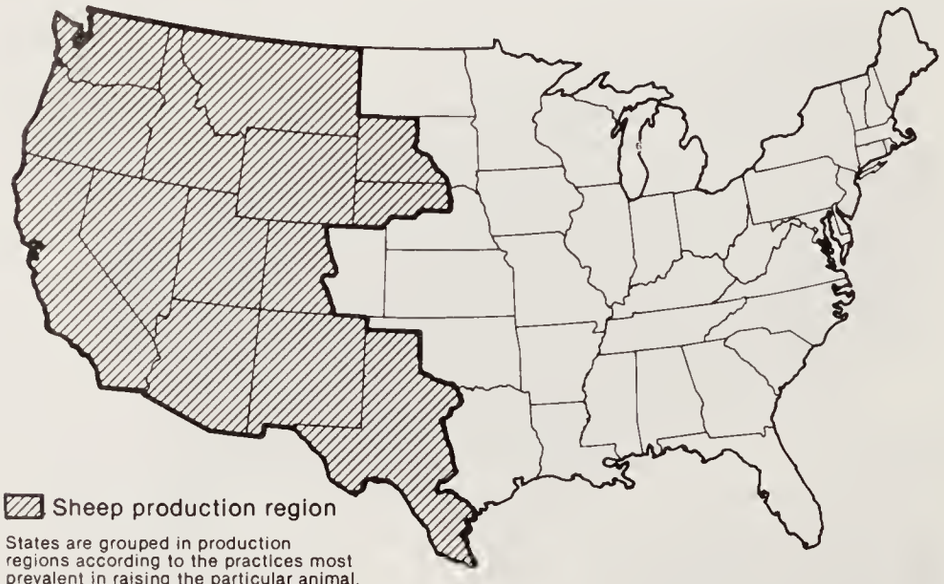
Hog Production Regions



States are grouped in production regions according to the practices most prevalent in raising the particular animal. The boundaries of the production regions for one enterprise, therefore, are not necessarily the same as those for another enterprise.

Figure 19

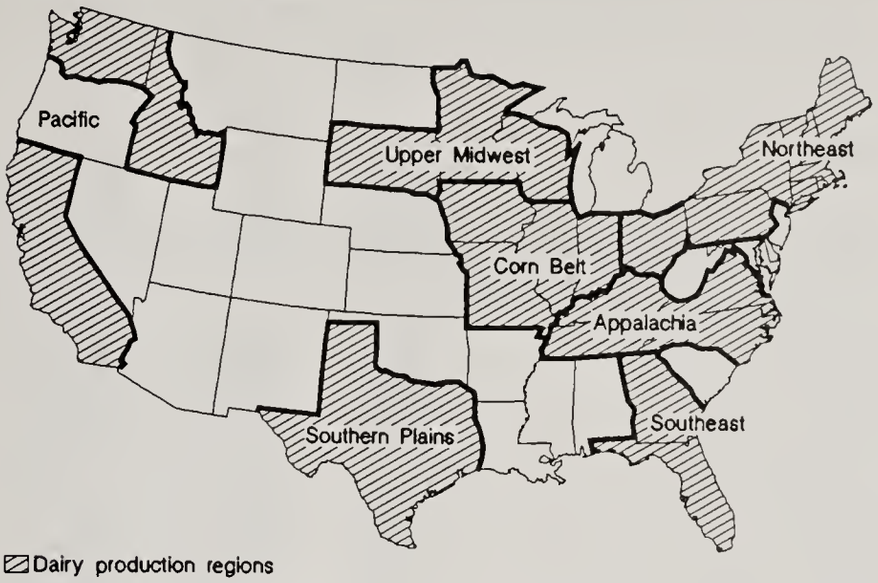
Sheep Production Region



States are grouped in production regions according to the practices most prevalent in raising the particular animal. The boundaries of the production regions for one enterprise, therefore, are not necessarily the same as those for another enterprise.

Figure 20

Dairy Production Regions



Dairy production regions

States are grouped in production regions according to the cultural practices most prevalent in raising the particular crop. The boundaries of the production regions for one crop, therefore, are not necessarily the same as those for another crop.

Table 1A--U.S. milk production cash costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	1,755.29	1,753.15	1,953.83
Cull cows	164.13	177.47	183.51
Total	1,919.42	1,930.62	2,137.34
Cash expenses:			
Feed--			
Concentrates (7,251 lbs) 1/	426.45	485.61	554.52
By-products (566 lbs)	26.93	33.04	30.88
Hay (6,390 lbs)	144.18	199.27	197.72
Silage (11,214 lbs)	73.11	117.06	91.34
Pasture and other forage	7.98	10.04	9.68
Other--			
Milk hauling and marketing	84.94	87.43	91.45
Artificial insemination	16.86	17.27	18.43
Veterinary and medicine	28.24	28.87	30.64
Livestock hauling	3.61	3.67	3.85
Fuel, lube, and electricity	31.59	31.29	33.85
Machinery and building repairs	52.54	54.85	56.91
Hired labor	136.46	143.60	151.85
DHIA fees	8.35	8.56	9.15
Dairy supplies	26.54	28.31	29.61
Dairy assessment	26.72	4.31	0
Total, variable cash expenses	1,094.50	1,253.18	1,309.88
General farm overhead	97.18	115.33	136.58
Taxes and insurance	48.13	54.73	50.97
Interest	141.56	145.03	155.09
Total, fixed cash expenses	286.87	315.09	342.64
Total, cash expenses	1,381.37	1,568.27	1,652.52
Cash receipts less cash expenses	538.05	362.35	484.82
Capital replacement 2/	218.23	240.60	233.46
Total, cash expenses and replacement	1,599.60	1,808.87	1,885.98
Net cash returns	319.82	121.75	251.36

Table 1B--U.S. milk production economic costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	1,919.42	1,930.62	2,137.34
Economic (full ownership) costs:			
Variable cash expenses	1,094.50	1,253.18	1,309.88
General farm overhead	97.18	115.33	136.58
Taxes and insurance	48.13	54.73	50.97
Capital replacement	218.23	240.60	233.46
Operating capital 3/	8.28	10.84	13.16
Other nonland capital 4/	79.88	99.83	109.32
Land 5/	18.91	26.84	24.27
Unpaid labor (14.93 hrs)	74.10	78.66	80.83
Total, economic costs	1,639.21	1,880.01	1,958.47
Residual returns to management and risk	280.21	50.61	178.87
Pounds of milk per unit	14,062	14,369	14,453

See footnotes at end of Table 55B.

Table 2A--U.S. milk production cash costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	12.51	12.23	13.55
Cull cows	1.18	1.24	1.27
Total	13.69	13.47	14.82
Cash expenses:			
Feed--			
Concentrates (51 lbs) 1/	3.06	3.42	3.88
By-products (3.7 lbs)	.18	.22	.20
Hay (44 lbs)	.99	1.37	1.33
Silage (78 lbs)	.53	.82	.64
Pasture and other forage	.06	.07	.07
Other--			
Milk hauling and marketing	.61	.61	.64
Artificial insemination	.12	.12	.13
Veterinary and medicine	.20	.20	.21
Livestock hauling	.03	.03	.03
Fuel, lube, and electricity	.23	.22	.24
Machinery and building repairs	.38	.38	.39
Hired labor	.96	.99	1.04
DHIA fees	.06	.06	.06
Dairy supplies	.19	.20	.20
Dairy assessment	.19	.03	0
Total, variable cash expenses	7.79	8.74	9.06
General farm overhead	.70	.81	.95
Taxes and insurance	.35	.39	.36
Interest	1.03	1.02	1.08
Total, fixed cash expenses	2.08	2.22	2.39
Total, cash expenses	9.87	10.96	11.45
Cash receipts less cash expenses	3.82	2.51	3.37
Capital replacement 2/	1.59	1.70	1.65
Total, cash expenses and replacement	11.46	12.66	13.10
Net cash returns	2.23	.81	1.72

Table 2B--U.S. milk production economic costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	13.69	13.47	14.82
Economic (full ownership) costs:			
Variable cash expenses	7.79	8.74	9.06
General farm overhead	.70	.81	.95
Taxes and insurance	.35	.39	.36
Capital replacement	1.59	1.70	1.65
Operating capital 3/	.06	.08	.09
Other nonland capital 4/	.58	.70	.77
Land 5/	.14	.19	.17
Unpaid labor (0.11 hr)	.54	.56	.57
Total, economic costs	11.75	13.17	13.62
Residual returns to management and risk	1.94	.30	1.20

See footnotes at end of Table 55B.

Table 3A--Appalachia milk production cash costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	1,714.64	1,717.93	1,813.62
Cull cows	97.22	105.35	110.33
Total	1,811.86	1,823.28	1,923.95
Cash expenses:			
Feed--			
Concentrates (7,048 lbs) 1/	445.59	522.21	579.94
By-products (358 lbs)	24.33	24.43	26.42
Hay (4,852 lbs)	84.63	99.39	80.36
Silage (12,456 lbs)	92.41	109.03	81.04
Pasture and other forage	9.42	10.32	10.23
Other--			
Milk hauling and marketing	75.47	80.91	84.58
Artificial insemination	10.04	10.30	11.07
Veterinary and medicine	19.48	19.96	21.44
Livestock hauling	2.68	2.73	2.91
Fuel, lube, and electricity	23.62	23.33	25.35
Machinery and building repairs	35.28	36.68	38.12
Hired labor	144.33	151.33	156.91
DHIA fees	5.83	5.98	6.43
Dairy supplies	24.79	26.48	27.86
Dairy assessment	24.12	3.89	0
Total, variable cash expenses	1,022.02	1,126.97	1,152.66
General farm overhead	87.61	102.32	115.44
Taxes and insurance	44.87	46.75	43.66
Interest	139.87	95.43	97.93
Total, fixed cash expenses	272.35	244.50	257.03
Total, cash expenses	1,294.37	1,371.47	1,409.69
Cash receipts less cash expenses	517.49	451.81	514.26
Capital replacement 2/	181.47	190.80	184.05
Total, cash expenses and replacement	1,475.84	1,562.27	1,593.74
Net cash returns	336.02	261.01	330.21

Table 3B--Appalachia milk production economic costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	1,811.86	1,823.28	1,923.95
Economic (full ownership) costs:			
Variable cash expenses	1,022.02	1,126.97	1,152.66
General farm overhead	87.61	102.32	115.44
Taxes and insurance	44.87	46.75	43.66
Capital replacement	181.47	190.80	184.05
Operating capital 3/	7.73	9.75	11.58
Other nonland capital 4/	71.15	86.68	94.38
Land 5/	38.62	44.71	39.46
Unpaid labor (7.28 hrs)	32.55	35.04	36.35
Total, economic costs	1,486.02	1,643.02	1,677.58
Residual returns to management and risk	325.84	180.26	246.37
Pounds of milk per unit	12,694	12,966	12,879

See footnotes at end of Table 55B.

Table 4A--Appalachia milk production cash costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	13.47	13.21	14.04
Cull cows	.77	.81	.86
Total	14.24	14.02	14.90
Cash expenses:			
Feed--			
Concentrates (56.2 lbs) 1/	3.55	4.08	4.58
By-products (2.6 lbs)	.18	.18	.19
Hay (38 lbs)	.69	.79	.64
Silage (94 lbs)	.71	.82	.61
Pasture and other forage	.08	.08	.08
Other--			
Milk hauling and marketing	.59	.62	.65
Artificial insemination	.08	.08	.08
Veterinary and medicine	.15	.15	.16
Livestock hauling	.02	.02	.02
Fuel, lube, and electricity	.19	.18	.20
Machinery and building repairs	.28	.29	.30
Hired labor	1.09	1.13	1.18
DHIA fees	.04	.04	.05
Dairy supplies	.19	.20	.21
Dairy assessment	.19	.03	0
Total, variable cash expenses	8.03	8.69	8.95
General farm overhead	.69	.79	.90
Taxes and insurance	.36	.37	.35
Interest	1.10	.73	.76
Total, fixed cash expenses	2.15	1.89	2.01
Total, cash expenses	10.18	10.58	10.96
Cash receipts less cash expenses	4.06	3.44	3.94
Capital replacement 2/	1.45	1.49	1.46
Total, cash expenses and replacement	11.63	12.07	12.42
Net cash returns	2.61	1.95	2.48

Table 4B--Appalachia milk production economic costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	14.24	14.02	14.90
Economic (full ownership) costs:			
Variable cash expenses	8.03	8.69	8.95
General farm overhead	.69	.79	.90
Taxes and insurance	.36	.37	.35
Capital replacement	1.45	1.49	1.46
Operating capital 3/	.06	.08	.09
Other nonland capital 4/	.57	.68	.75
Land 5/	.31	.35	.32
Unpaid labor (0.06 hr)	.27	.28	.30
Total, economic costs	11.74	12.73	13.12
Residual returns to management and risk	2.50	1.29	1.78

See footnotes at end of Table 55B.

Table 5A--Corn Belt milk production cash costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	1,622.19	1,642.54	1,840.73
Cull cows	186.19	200.00	207.49
Total	1,808.38	1,842.54	2,048.22
Cash expenses:			
Feed--			
Concentrates (8,452 lbs) 1/	478.18	545.62	603.86
By-products (335 lbs)	19.84	22.75	19.85
Hay (5,710 lbs)	76.09	119.09	107.50
Silage (9,708 lbs)	43.22	77.91	56.51
Pasture and other forage	8.72	10.53	10.89
Other--			
Milk hauling and marketing	79.34	81.29	87.63
Artificial insemination	14.34	14.65	15.54
Veterinary and medicine	41.88	42.48	44.89
Livestock hauling	5.98	6.10	6.44
Fuel, lube, and electricity	34.08	33.16	34.97
Machinery and building repairs	53.25	55.44	57.18
Hired labor	113.23	119.02	125.96
DHIA fees	6.99	7.18	7.73
Dairy supplies	26.33	27.84	28.72
Dairy assessment	24.77	4.07	0
Total, variable cash expenses	1,026.24	1,167.13	1,207.67
General farm overhead	75.37	78.98	95.30
Taxes and insurance	49.13	56.45	52.18
Interest	166.01	226.71	245.17
Total, fixed cash expenses	290.51	362.14	392.65
Total, cash expenses	1,316.75	1,529.27	1,600.32
Cash receipts less cash expenses	491.63	313.27	447.90
Capital replacement 2/	235.02	261.14	254.22
Total, cash expenses and replacement	1,551.77	1,790.41	1,854.54
Net cash returns	256.61	52.13	193.68

Table 5B--Corn Belt milk production economic costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	1,808.38	1,842.54	2,048.22
Economic (full ownership) costs:			
Variable cash expenses	1,026.24	1,167.13	1,207.67
General farm overhead	75.37	78.98	95.30
Taxes and insurance	49.13	56.45	52.18
Capital replacement	235.02	261.14	254.22
Operating capital 3/	7.76	10.10	12.14
Other nonland capital 4/	85.00	106.39	117.09
Land 5/	20.30	34.70	30.31
Unpaid labor (22.77 hrs)	117.32	122.38	126.81
Total, economic costs	1,616.14	1,837.27	1,895.72
Residual returns to management and risk	192.24	5.27	152.50
Pounds of milk per unit	13,036	13,569	13,863

See footnotes at end of Table 55B.

Table 6A--Corn Belt milk production cash costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	12.41	12.09	13.25
Cull cows	1.45	1.48	1.50
Total	13.86	13.57	14.75
Cash expenses:			
Feed--			
Concentrates (61.5 lbs) 1/	3.68	4.06	4.42
By-products (2.7 lbs)	.16	.18	.16
Hay (42 lbs)	.60	.90	.80
Silage (68 lbs)	.32	.56	.40
Pasture and other forage	.07	.08	.09
Other--			
Milk hauling and marketing	.60	.59	.62
Artificial insemination	.11	.11	.11
Veterinary and medicine	.30	.29	.30
Livestock hauling	.05	.05	.05
Fuel, lube, and electricity	.26	.25	.25
Machinery and building repairs	.41	.41	.41
Hired labor	.89	.90	.94
DHIA fees	.05	.05	.06
Dairy supplies	.19	.20	.20
Dairy assessment	.19	.03	0
Total, variable cash expenses	7.88	8.66	8.81
General farm overhead	.58	.58	.69
Taxes and insurance	.38	.42	.38
Interest	1.27	1.67	1.77
Total, fixed cash expenses	2.23	2.67	2.84
Total, cash expenses	10.11	11.33	11.65
Cash receipts less cash expenses	3.75	2.24	3.10
Capital replacement 2/	1.82	1.92	1.83
Total, cash expenses and replacement	11.93	13.25	13.48
Net cash returns	1.93	.32	1.27

Table 6B--Corn Belt milk production economic costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	13.86	13.57	14.75
Economic (full ownership) costs:			
Variable cash expenses	7.88	8.66	8.81
General farm overhead	.58	.58	.69
Taxes and insurance	.38	.42	.38
Capital replacement	1.82	1.92	1.83
Operating capital 3/	.06	.07	.09
Other nonland capital 4/	.66	.79	.85
Land 5/	.16	.26	.23
Unpaid labor (0.16 hr)	.88	.87	.89
Total, economic costs	12.42	13.57	13.77
Residual returns to management and risk	1.44	0	.98

See footnotes at end of Table 55B.

Table 7A--Northeast milk production cash costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	1,865.03	1,891.55	2,091.98
Cull cows	158.15	173.13	179.48
Total	2,023.18	2,064.68	2,271.46
Cash expenses:			
Feed--			
Concentrates (7,272 lbs) 1/	423.93	495.12	562.43
By-products (508 lbs)	13.97	17.30	11.45
Hay (5,252 lbs)	89.81	106.60	109.19
Silage (14,500 lbs)	80.50	105.10	99.19
Pasture and other forage	6.37	7.19	7.43
Other--			
Milk hauling and marketing	112.23	115.71	121.68
Artificial insemination	24.17	24.88	26.71
Veterinary and medicine	33.41	34.35	36.78
Livestock hauling	1.67	1.70	1.80
Fuel, lube, and electricity	37.82	38.24	40.92
Machinery and building repairs	54.45	56.90	59.16
Hired labor	141.72	154.98	160.13
DHIA fees	10.47	10.76	11.52
Dairy supplies	28.14	30.02	31.52
Dairy assessment	27.41	4.49	0
Total, variable cash expenses	1,086.07	1,203.34	1,279.91
General farm overhead	122.17	132.70	157.52
Taxes and insurance	55.83	60.30	60.81
Interest	130.90	137.84	147.42
Total, fixed cash expenses	308.90	330.84	365.75
Total, cash expenses	1,394.97	1,534.18	1,645.66
Cash receipts less cash expenses	628.21	530.50	625.80
Capital replacement 2/	249.30	265.20	270.96
Total, cash expenses and replacement	1,644.27	1,799.38	1,916.62
Net cash returns	378.91	265.30	354.84

Table 7B--Northeast milk production economic costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	2,023.18	2,064.68	2,271.46
Economic (full ownership) costs:			
Variable cash expenses	1,086.07	1,203.34	1,279.91
General farm overhead	122.17	132.70	157.52
Taxes and insurance	55.83	60.30	60.81
Capital replacement	249.30	265.20	270.96
Operating capital 3/	8.21	10.41	12.86
Other nonland capital 4/	86.08	105.74	119.48
Land 5/	28.00	36.80	40.51
Unpaid labor (20.37 hrs)	97.33	110.29	114.60
Total, economic costs	1,732.99	1,924.78	2,056.65
Residual returns to management and risk	290.19	139.90	214.81
Pounds of milk per unit	14,428	14,979	14,956

See footnotes at end of Table 55B.

Table 8A--Northeast milk production cash costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	12.93	12.64	14.00
Cull cows	1.09	1.16	1.20
Total	14.02	13.80	15.20
Cash expenses:			
Feed--			
Concentrates (48.8 lbs) 1/	2.93	3.30	3.76
By-products (3.3 lbs)	.10	.11	.07
Hay (36 lbs)	.62	.71	.73
Silage (98 lbs)	.56	.70	.66
Pasture and other forage	.04	.05	.05
Other--			
Milk hauling and marketing	.78	.78	.82
Artificial insemination	.17	.17	.18
Veterinary and medicine	.23	.23	.25
Livestock hauling	.01	.01	.01
Fuel, lube, and electricity	.26	.25	.27
Machinery and building repairs	.38	.38	.40
Hired labor	.97	1.02	1.06
DHIA fees	.07	.07	.08
Dairy supplies	.19	.20	.21
Dairy assessment	.19	.03	0
Total, variable cash expenses	7.50	8.01	8.55
General farm overhead	.85	.89	1.05
Taxes and insurance	.39	.40	.41
Interest	.91	.92	.99
Total, fixed cash expenses	2.15	2.21	2.45
Total, cash expenses	9.65	10.22	11.00
Cash receipts less cash expenses	4.37	3.58	4.20
Capital replacement 2/	1.73	1.78	1.82
Total, cash expenses and replacement	11.38	12.00	12.82
Net cash returns	2.64	1.80	2.38

Table 8B--Northeast milk production economic costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	14.02	13.80	15.20
Economic (full ownership) costs:			
Variable cash expenses	7.50	8.01	8.55
General farm overhead	.85	.89	1.05
Taxes and insurance	.39	.40	.41
Capital replacement	1.73	1.78	1.82
Operating capital 3/	.06	.07	.09
Other nonland capital 4/	.60	.71	.80
Land 5/	.19	.25	.27
Unpaid labor (0.14 hr)	.68	.75	.78
Total, economic costs	12.00	12.86	13.77
Residual returns to management and risk	2.02	.94	1.43

See footnotes at end of Table 55B.

Table 9A--Pacific milk production cash costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	1,943.73	1,816.84	2,083.67
Cull cows	173.63	186.73	187.70
Total	2,117.36	2,003.57	2,271.37
Cash expenses:			
Feed--			
Concentrates (6,174 lbs) 1/	461.30	487.34	548.40
By-products (1,617 lbs)	75.47	95.21	97.98
Hay (9,342 lbs)	350.97	415.76	485.13
Silage (7,670 lbs)	43.17	51.16	54.54
Pasture and other forage	8.11	8.68	9.64
Other--			
Milk hauling and marketing	69.67	67.99	71.38
Artificial insemination	13.78	14.16	15.20
Veterinary and medicine	27.40	28.14	30.06
Livestock hauling	2.00	2.06	2.17
Fuel, lube, and electricity	26.96	27.17	29.78
Machinery and building repairs	56.28	59.78	62.49
Hired labor	215.81	219.49	234.02
DHIA fees	8.31	8.52	9.16
Dairy supplies	29.04	31.10	32.50
Dairy assessment	31.96	4.89	0
Total, variable cash expenses	1,420.23	1,521.45	1,682.45
General farm overhead	66.37	81.84	100.22
Taxes and insurance	28.98	29.96	29.07
Interest	79.40	112.54	124.02
Total, fixed cash expenses	174.75	224.34	253.31
Total, cash expenses	1,594.98	1,745.79	1,935.76
Cash receipts less cash expenses	522.38	257.78	335.61
Capital replacement 2/	110.06	118.02	120.30
Total, cash expenses and replacement	1,705.04	1,863.81	2,056.06
Net cash returns	412.32	139.76	215.31

Table 9B--Pacific milk production economic costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	2,117.36	2,003.57	2,271.37
Economic (full ownership) costs:			
Variable cash expenses	1,420.23	1,521.45	1,682.45
General farm overhead	66.37	81.84	100.22
Taxes and insurance	28.98	29.96	29.07
Capital replacement	110.06	118.02	120.30
Operating capital 3/	10.74	13.16	16.91
Other nonland capital 4/	56.59	69.88	77.78
Land 5/	9.45	9.20	7.18
Unpaid labor (4.85 hrs)	27.77	28.35	29.92
Total, economic costs	1,730.19	1,871.86	2,063.83
Residual returns to management and risk	387.17	131.71	207.54
Pounds of milk per unit	16,819	16,311	16,605

See footnotes at end of Table 55B.

Table 10A--Pacific milk production cash costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	11.56	11.14	12.54
Cull cows	1.04	1.15	1.14
Total	12.60	12.29	13.68
Cash expenses:			
Feed--			
Concentrates (37.4 lbs) 1/	2.74	2.99	3.30
By-products (9.8 lbs)	.45	.59	.59
Hay (58 lbs)	2.08	2.55	2.93
Silage (46 lbs)	.26	.31	.33
Pasture and other forage	.05	.05	.06
Other--			
Milk hauling and marketing	.42	.42	.43
Artificial insemination	.08	.09	.09
Veterinary and medicine	.16	.17	.18
Livestock hauling	.01	.01	.01
Fuel, lube, and electricity	.16	.17	.18
Machinery and building repairs	.34	.37	.38
Hired labor	1.28	1.34	1.40
DHIA fees	.05	.05	.05
Dairy supplies	.18	.19	.20
Dairy assessment	.19	.03	0
Total, variable cash expenses	8.45	9.33	10.13
General farm overhead	.40	.50	.60
Taxes and insurance	.18	.19	.18
Interest	.47	.69	.75
Total, fixed cash expenses	1.05	1.38	1.53
Total, cash expenses	9.50	10.71	11.66
Cash receipts less cash expenses	3.10	1.58	2.02
Capital replacement 2/	.67	.73	.74
Total, cash expenses and replacement	10.17	11.44	12.40
Net cash returns	2.43	.85	1.28

Table 10B--Pacific milk production economic costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	12.60	12.29	13.68
Economic (full ownership) costs:			
Variable cash expenses	8.45	9.33	10.13
General farm overhead	.40	.50	.60
Taxes and insurance	.18	.19	.18
Capital replacement	.67	.73	.74
Operating capital 3/	.06	.08	.10
Other nonland capital 4/	.34	.43	.47
Land 5/	.06	.06	.04
Unpaid labor (0.03 hr)	.17	.18	.18
Total, economic costs	10.33	11.50	12.44
Residual returns to management and risk	2.27	.79	1.24

See footnotes at end of Table 55B.

Table 11A--Southeast milk production cash costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	1,846.47	1,868.82	2,049.79
Cull cows	142.64	159.86	164.60
Total	1,989.11	2,028.68	2,214.39
Cash expenses:			
Feed--			
Concentrates (11,574 lbs) 1/	594.56	735.61	863.40
By-products (714 lbs)	50.23	51.16	56.12
Hay (2,808 lbs)	66.05	70.78	72.13
Silage (6,026 lbs)	42.08	54.97	45.89
Pasture and other forage	14.45	16.95	17.15
Other--			
Milk hauling and marketing	103.21	101.54	111.13
Artificial insemination	7.76	7.97	8.56
Veterinary and medicine	19.79	20.31	21.77
Livestock hauling	1.73	1.77	1.89
Fuel, lube, and electricity	20.66	21.15	23.12
Machinery and building repairs	24.70	26.03	27.21
Hired labor	268.75	279.73	286.28
DHIA fees	4.10	4.21	4.53
Dairy supplies	23.39	24.93	26.14
Dairy assessment	23.25	3.77	0
Total, variable cash expenses	1,264.71	1,420.88	1,565.32
General farm overhead	73.21	117.07	135.49
Taxes and insurance	30.52	33.16	32.95
Interest	82.75	65.75	69.75
Total, fixed cash expenses	186.48	215.98	238.19
Total, cash expenses	1,451.19	1,636.86	1,803.51
Cash receipts less cash expenses	537.92	391.82	410.88
Capital replacement 2/	102.81	110.75	112.64
Total, cash expenses and replacement	1,554.00	1,747.61	1,916.15
Net cash returns	435.11	281.07	298.24

Table 11B--Southeast milk production economic costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	1,989.11	2,028.68	2,214.39
Economic (full ownership) costs:			
Variable cash expenses	1,264.71	1,420.88	1,565.32
General farm overhead	73.21	117.07	135.49
Taxes and insurance	30.52	33.16	32.95
Capital replacement	102.81	110.75	112.64
Operating capital 3/	9.56	12.29	15.73
Other nonland capital 4/	46.50	58.75	65.86
Land 5/	12.94	15.79	15.28
Unpaid labor (2.12 hrs)	10.01	10.60	11.14
Total, economic costs	1,550.26	1,779.29	1,954.41
Residual returns to management and risk	438.85	249.39	259.98
Pounds of milk per unit	12,237	12,566	13,057

See footnotes at end of Table 55B.

Table 12A--Southeast milk production cash costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	15.10	14.87	15.70
Cull cows	1.17	1.27	1.26
Total	16.27	16.14	16.96
Cash expenses:			
Feed--			
Concentrates (88.6 lbs) 1/	4.86	5.85	6.61
By-products (5.5 lbs)	.41	.41	.43
Hay (20 lbs)	.54	.56	.55
Silage (46 lbs)	.34	.44	.35
Pasture and other forage	.12	.13	.13
Other--			
Milk hauling and marketing	.84	.81	.85
Artificial insemination	.06	.06	.07
Veterinary and medicine	.16	.16	.17
Livestock hauling	.01	.01	.01
Fuel, lube, and electricity	.17	.17	.18
Machinery and building repairs	.20	.21	.21
Hired labor	2.20	2.23	2.19
DHIA fees	.03	.03	.03
Dairy supplies	.19	.20	.20
Dairy assessment	.19	.03	0
Total, variable cash expenses	10.32	11.30	11.98
General farm overhead	.60	.93	1.04
Taxes and insurance	.25	.26	.25
Interest	.68	.52	.53
Total, fixed cash expenses	1.53	1.71	1.82
Total, cash expenses	11.85	13.01	13.80
Cash receipts less cash expenses	4.42	3.13	3.16
Capital replacement 2/	.84	.88	.86
Total, cash expenses and replacement	12.69	13.89	14.66
Net cash returns	3.58	2.25	2.30

Table 12B--Southeast milk production economic costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	16.27	16.14	16.96
Economic (full ownership) costs:			
Variable cash expenses	10.32	11.30	11.98
General farm overhead	.60	.93	1.04
Taxes and insurance	.25	.26	.25
Capital replacement	.84	.88	.86
Operating capital 3/	.08	.10	.12
Other nonland capital 4/	.38	.47	.50
Land 5/	.11	.13	.12
Unpaid labor (0.02 hr)	.08	.08	.09
Total, economic costs	12.66	14.15	14.96
Residual returns to management and risk	3.61	1.99	2.00

See footnotes at end of Table 55B.

Table 13A--Southern Plains milk production cash costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	1,788.57	1,713.67	1,915.86
Cull cows	167.00	177.65	185.48
Total	1,955.57	1,891.32	2,101.34
Cash expenses:			
Feed--			
Concentrates (9,050 lbs) 1/	517.69	605.30	721.26
By-products (370 lbs)	16.54	17.35	19.13
Hay (8,094 lbs)	208.56	261.07	243.07
Silage (1,752 lbs)	12.59	17.85	13.98
Pasture and other forage	15.10	18.98	17.17
Other--			
Milk hauling and marketing	94.00	96.07	104.36
Artificial insemination	17.17	17.65	18.94
Veterinary and medicine	10.35	10.62	11.38
Livestock hauling	2.73	2.79	2.97
Fuel, lube, and electricity	22.74	22.63	25.53
Machinery and building repairs	30.64	32.26	33.71
Hired labor	174.29	174.63	181.77
DHIA fees	9.21	9.46	10.15
Dairy supplies	24.70	26.38	27.72
Dairy assessment	24.81	3.89	0
Total, variable cash expenses	1,181.12	1,316.93	1,431.14
General farm overhead	78.42	114.63	135.54
Taxes and insurance	42.24	46.71	43.47
Interest	80.57	86.00	92.88
Total, fixed cash expenses	201.23	247.34	271.89
Total, cash expenses	1,382.35	1,564.27	1,703.03
Cash receipts less cash expenses	573.22	327.05	398.31
Capital replacement 2/	122.50	135.95	132.45
Total, cash expenses and replacement	1,504.85	1,700.22	1,835.48
Net cash returns	450.72	191.10	265.86

Table 13B--Southern Plains milk production economic costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	1,955.57	1,891.32	2,101.34
Economic (full ownership) costs:			
Variable cash expenses	1,181.12	1,316.93	1,431.14
General farm overhead	78.42	114.63	135.54
Taxes and insurance	42.24	46.71	43.47
Capital replacement	122.50	135.95	132.45
Operating capital 3/	8.93	11.39	14.38
Other nonland capital 4/	54.55	69.03	75.25
Land 5/	23.31	28.53	18.91
Unpaid labor (14.00 hrs)	71.82	71.96	74.90
Total, economic costs	1,582.89	1,795.13	1,926.04
Residual returns to management and risk	372.68	96.19	175.30
Pounds of milk per unit	13,055	12,982	13,379

See footnotes at end of Table 55B.

Table 14A--Southern Plains milk production cash costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	13.70	13.20	14.32
Cull cows	1.28	1.37	1.39
Total	14.98	14.57	15.71
Cash expenses:			
Feed--			
Concentrates (67.6 lbs) 1/	3.97	4.66	5.39
By-products (2.8 lbs)	.13	.13	.14
Hay (60 lbs)	1.60	2.01	1.82
Silage (14 lbs)	.10	.14	.10
Pasture and other forage	.12	.15	.13
Other--			
Milk hauling and marketing	.72	.74	.78
Artificial insemination	.13	.14	.14
Veterinary and medicine	.08	.08	.09
Livestock hauling	.02	.02	.02
Fuel, lube, and electricity	.17	.17	.19
Machinery and building repairs	.23	.25	.25
Hired labor	1.34	1.35	1.36
DHIA fees	.07	.07	.08
Dairy supplies	.19	.20	.21
Dairy assessment	.19	.03	0
Total, variable cash expenses	9.06	10.14	10.70
General farm overhead	.60	.88	1.01
Taxes and insurance	.32	.36	.32
Interest	.62	.66	.69
Total, fixed cash expenses	1.54	1.90	2.02
Total, cash expenses	10.60	12.04	12.72
Cash receipts less cash expenses	4.38	2.53	2.99
Capital replacement 2/	.94	1.05	.99
Total, cash expenses and replacement	11.54	13.09	13.71
Net cash returns	3.44	1.48	2.00

Table 14B--Southern Plains milk production economic costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	14.98	14.57	15.71
Economic (full ownership) costs:			
Variable cash expenses	9.06	10.14	10.70
General farm overhead	.60	.88	1.01
Taxes and insurance	.32	.36	.32
Capital replacement	.94	1.05	.99
Operating capital 3/	.07	.09	.11
Other nonland capital 4/	.42	.53	.56
Land 5/	.18	.22	.14
Unpaid labor (0.11 hr)	.55	.55	.56
Total, economic costs	12.14	13.82	14.39
Residual returns to management and risk	2.84	.75	1.32

See footnotes at end of Table 55B.

Table 15A--Upper Midwest milk production cash costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	1,630.27	1,658.70	1,850.24
Cull cows	173.82	186.86	194.77
Total	1,804.09	1,845.56	2,045.01
Cash expenses:			
Feed--			
Concentrates (6,808 lbs) 1/	369.11	414.91	479.64
By-products (202 lbs)	16.86	21.06	14.16
Hay (6,382 lbs)	126.59	218.09	174.92
Silage (12,584 lbs)	94.64	186.49	131.71
Pasture and other forage	7.25	10.84	9.13
Other--			
Milk hauling and marketing	72.96	76.83	79.09
Artificial insemination	15.88	16.33	17.54
Veterinary and medicine	25.33	25.95	27.63
Livestock hauling	5.47	5.59	5.91
Fuel, lube, and electricity	31.98	31.25	34.52
Machinery and building repairs	57.80	60.15	62.46
Hired labor	87.56	90.17	94.03
DHIA fees	8.06	8.27	8.81
Dairy supplies	25.19	26.87	28.02
Dairy assessment	25.58	4.17	0
Total, variable cash expenses	970.26	1,196.97	1,167.57
General farm overhead	105.16	131.79	157.45
Taxes and insurance	53.50	66.17	59.01
Interest	181.13	165.34	178.12
Total, fixed cash expenses	339.79	363.30	394.58
Total, cash expenses	1,310.05	1,560.27	1,562.15
Cash receipts less cash expenses	494.04	285.29	482.86
Capital replacement 2/	266.13	307.51	293.56
Total, cash expenses and replacement	1,576.18	1,867.78	1,855.71
Net cash returns	227.91	(22.22)	189.30

Table 15B--Upper Midwest milk production economic costs and returns, per cow, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	1,804.09	1,845.56	2,045.01
Economic (full ownership) costs:			
Variable cash expenses	970.26	1,196.97	1,167.57
General farm overhead	105.16	131.79	157.45
Taxes and insurance	53.50	66.17	59.01
Capital replacement	266.13	307.51	293.56
Operating capital 3/	7.34	10.35	11.73
Other nonland capital 4/	91.52	117.48	127.65
Land 5/	11.84	22.29	17.72
Unpaid labor (16.83 hrs)	79.50	82.21	85.96
Total, economic costs	1,585.25	1,934.77	1,920.65
Residual returns to management and risk	218.84	(89.21)	124.36
Pounds of milk per unit	13,462	13,912	13,806

See footnotes at end of Table 55B.

Table 16A--Upper Midwest milk production cash costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Cash receipts:			
Milk	12.10	11.92	13.40
Cull cows	1.30	1.35	1.41
Total	13.40	13.27	14.81
Cash expenses:			
Feed--			
Concentrates (49.3 lbs) 1/	2.76	2.99	3.47
By-products (1.5 lbs)	.12	.15	.10
Hay (46 lbs)	.95	1.58	1.27
Silage (92 lbs)	.70	1.34	.95
Pasture and other forage	.05	.08	.07
Other--			
Milk hauling and marketing	.54	.55	.57
Artificial insemination	.12	.12	.13
Veterinary and medicine	.19	.19	.20
Livestock hauling	.04	.04	.04
Fuel, lube, and electricity	.24	.22	.25
Machinery and building repairs	.43	.43	.45
Hired labor	.65	.65	.68
DHIA fees	.06	.06	.06
Dairy supplies	.19	.19	.20
Dairy assessment	.19	.03	0
Total, variable cash expenses	7.23	8.62	8.44
General farm overhead	.78	.95	1.14
Taxes and insurance	.40	.48	.43
Interest	1.35	1.19	1.29
Total, fixed cash expenses	2.53	2.62	2.86
Total, cash expenses	9.76	11.24	11.30
Cash receipts less cash expenses	3.64	2.03	3.51
Capital replacement 2/	1.98	2.21	2.13
Total, cash expenses and replacement	11.74	13.45	13.43
Net cash returns	1.66	(.18)	1.38

Table 16B--Upper Midwest milk production economic costs and returns, per cwt, 1987-89

Item	1987	1988	1989
		Dollars	
Total, cash receipts	13.40	13.27	14.81
Economic (full ownership) costs:			
Variable cash expenses	7.23	8.62	8.44
General farm overhead	.78	.95	1.14
Taxes and insurance	.40	.48	.43
Capital replacement	1.98	2.21	2.13
Operating capital 3/	.05	.07	.08
Other nonland capital 4/	.68	.85	.92
Land 5/	.09	.16	.13
Unpaid labor (0.12 hr)	.60	.60	.63
Total, economic costs	11.81	13.94	13.90
Residual returns to management and risk	1.59	(.67)	.91
Pounds of milk per unit	100	100	100

See footnotes at end of Table 55B.

Table 17A--U.S. fed cattle production cash costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Cash receipts			
Fed beef (100 lbs) 1/	65.44	70.53	73.76
Total	65.44	70.53	73.76
Cash expenses:			
Feeders--			
Feeders (0.62 cwt)	43.99	48.99	50.49
Feed--			
Grain (2.54 cwt)	7.57	11.05	11.81
Protein supplements (0.25 cwt)	2.56	2.97	3.04
Salt and minerals (0.03 cwt)	.16	.16	.17
Hay (0.02 ton)	.93	1.04	1.14
Silage (0.04 ton)	.74	1.18	.81
Haylage (0.01 ton)	.04	.07	.05
Other--			
Veterinary and medicine	.57	.58	.62
Livestock hauling	.24	.24	.25
Marketing	.06	.06	.06
Bedding	.07	.06	.07
Fuel, lube, and electricity	.48	.48	.58
Machinery and building repairs	.58	.59	.61
Hired labor (0.73 hr)	.74	.78	.81
Miscellaneous	.90	.98	1.03
Manure credit	-.06	-.07	-.07
Total, variable cash expenses	59.57	69.16	71.47
General farm overhead	1.41	1.59	1.76
Taxes and insurance	.18	.17	.17
Hired management	.12	.13	.13
Interest	5.77	6.52	6.63
Total, fixed cash expenses	7.48	8.41	8.69
Total, cash expenses	67.05	77.57	80.16
Cash receipts less cash expenses	-1.61	-7.04	-6.40
Capital replacement 2/	1.22	1.18	1.22
Total, cash expenses and replacement	68.27	78.75	81.38
Net cash returns	-2.83	-8.22	-7.62

Table 17B--U.S. fed cattle production economic costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Total, cash receipts	65.44	70.53	73.76
Economic (full ownership) costs:			
Variable cash expenses	59.57	69.16	71.47
General farm overhead	1.41	1.59	1.76
Taxes and insurance	.18	.17	.17
Hired management	.12	.13	.13
Capital replacement	1.22	1.18	1.22
Operating capital 3/	.73	.97	1.16
Other nonland capital 4/	.27	.30	.34
Land 5/	.04	.05	.06
Unpaid labor (0.18 hr)	.60	.57	.63
Total, economic costs	64.14	74.12	76.94
Residual returns to management and risk	1.30	-3.59	-3.18

See footnotes at end of Table 55B.

Table 18A--Fed cattle production cash costs and returns, commercial feedlots, all sizes of operation, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Cash receipts			
Fed beef (100 lbs) 1/	65.56	70.65	73.88
Total	65.56	70.65	73.88
Cash expenses:			
Feeders--			
Feeders (0.65 cwt)	45.90	50.89	52.46
Feed--			
Grain (2.48 cwt)	7.54	11.01	11.77
Protein supplements (0.25 cwt)	2.45	2.86	2.91
Salt and minerals (0.04 cwt)	.19	.19	.20
Hay (0.01 ton)	.94	.99	1.02
Silage (0.01 ton)	.25	.29	.21
Other--			
Veterinary and medicine	.53	.55	.59
Livestock hauling	.13	.13	.14
Fuel, lube, and electricity	.36	.37	.42
Machinery and building repairs	.30	.32	.34
Hired labor (0.85 hr)	.77	.81	.83
Miscellaneous	1.10	1.17	1.23
Manure credit	-.06	-.07	-.07
Total, variable cash expenses	60.40	69.51	72.05
Taxes and insurance	.07	.07	.07
Hired management	.14	.15	.16
Interest	5.18	6.29	6.40
Total, fixed cash expenses	5.39	6.51	6.63
Total, cash expenses	65.79	76.02	78.68
Cash receipts less cash expenses	-.23	-5.37	-4.80
Capital replacement 2/	.47	.49	.51
Total, cash expenses and replacement	66.26	76.51	79.19
Net cash returns	-.70	-5.86	-5.31

Table 18B--Fed cattle production economic costs and returns, commercial feedlots, all sizes of operation, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Total, cash receipts	65.56	70.65	73.88
Economic (full ownership) costs:			
Variable cash expenses	60.40	69.51	72.05
Taxes and insurance	.07	.07	.07
Hired management	.14	.15	.16
Capital replacement	.47	.49	.51
Operating capital 3/	.73	.97	1.16
Other nonland capital 4/	.11	.14	.15
Land 5/	.02	.02	.02
Total, economic costs	61.94	71.35	74.12
Residual returns to management and risk	3.62	-.70	-.24

See footnotes at end of Table 55B.

Table 19A--Fed cattle production cash costs and returns, farmer feedlots, all sizes of operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts			
Fed beef (100 lbs) 1/	64.90	69.93	73.11
Total	64.90	69.93	73.11
Cash expenses:			
Feeders--			
Feeders (0.46 cwt)	35.34	39.19	40.39
Feed--			
Grain (2.86 cwt)	7.70	11.25	12.04
Protein supplements (0.27 cwt)	3.04	3.54	3.74
Hay (0.05 cwt)	.85	1.31	1.70
Silage (0.18 ton)	2.95	5.74	3.87
Haylage (0.03 ton)	.24	.40	.32
Pasture (0.01 ton)	.01	.01	.01
Other--			
Veterinary and medicine	.72	.74	.80
Livestock hauling	.78	.79	.85
Marketing	.34	.36	.38
Bedding	.36	.37	.40
Fuel, lube, and electricity	1.02	1.02	1.36
Machinery and building repairs	1.85	1.94	2.01
Hired labor (0.11 hr)	.59	.63	.69
Manure credit	-.07	-.08	-.08
Total, variable cash expenses	55.72	67.21	68.48
General farm overhead	7.79	9.79	10.72
Taxes and insurance	.66	.66	.66
Interest	8.44	7.69	7.82
Total, fixed cash expenses	16.89	18.14	19.20
Total, cash expenses	72.61	85.35	87.68
Cash receipts less cash expenses	-7.71	-15.42	-14.57
Capital replacement 2/	4.58	4.72	4.87
Total, cash expenses and replacement	77.19	90.07	92.55
Net cash returns	-12.29	-20.14	-19.44

Table 19B--Fed cattle production economic costs and returns, farmer feedlots, all sizes of operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	64.9	69.93	73.11
Economic (full ownership) costs:			
Variable cash expenses	55.72	67.21	68.48
General farm overhead	7.79	9.79	10.72
Taxes and insurance	.66	.66	.66
Capital replacement	4.58	4.72	4.87
Operating capital 3/	.70	.97	1.15
Other nonland capital 4/	.97	1.15	1.30
Land 5/	.16	.21	.25
Unpaid labor (1.02 hrs)	3.31	3.52	3.86
Total, economic costs	73.89	88.23	91.29
Residual returns to management and risk	-8.99	-18.30	-18.18

See footnotes at end of Table 55B.

Table 20A--U.S. cow-calf production cash costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Cash receipts:			
Steer calves (111.9 lbs) 1/	94.86	106.29	110.21
Heifer calves (79.1 lbs)	59.82	68.24	68.87
Feeder steers (106.2 lbs)	79.68	88.81	91.04
Feeder heifers (76.3 lbs)	54.42	60.44	62.25
Cull cows (80.5 lbs)	34.61	36.44	37.42
Total, cash receipts	323.39	360.22	369.79
Cash expenses:			
Feed--			
Grain (2.04 cwt.)	6.54	9.49	9.81
Protein supplements (1.46 cwt)	15.97	18.64	19.61
Salt and minerals (0.33 cwt)	1.98	1.98	2.05
Hay (1.24 ton)	31.77	44.02	36.44
Silage (0.28 ton)	5.09	7.00	4.96
Pasture	31.78	34.89	36.90
Public grazing	.71	.75	.79
Crop residue	.07	.08	.09
Other--			
Veterinary and medicine	6.72	6.91	7.40
Livestock hauling	1.85	1.89	2.02
Marketing	4.24	4.54	4.77
Custom feed mixing	.28	.29	.30
Fuel, lube, and electricity	12.76	12.71	14.73
Machinery and building repairs	21.83	22.81	23.55
Hired labor (3.20 hrs)	14.47	15.06	15.67
Miscellaneous	.21	.23	.24
Total, variable cash expenses	156.27	181.29	179.33
General farm overhead	38.81	50.43	54.21
Taxes and insurance	29.04	30.06	32.27
Interest	42.04	39.62	39.57
Total, fixed cash expenses	109.89	120.11	126.05
Total, cash expenses	266.16	301.40	305.38
Cash receipts less cash expenses	57.23	58.82	64.41
Capital replacement 2/	64.82	66.61	67.71
Total, cash expenses and replacement	330.98	368.01	373.09
Net cash returns	-7.59	-7.79	-3.30

Table 20B--U.S. cow-calf production economic costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Total, cash receipts	323.39	360.22	369.79
Economic (full ownership) costs:			
Variable cash expenses	156.27	181.29	179.33
General farm overhead	38.81	50.43	54.21
Taxes and insurance	29.04	30.06	32.27
Capital replacement	64.82	66.61	67.71
Operating capital 3/	4.73	6.27	7.21
Other nonland capital 4/	26.79	32.23	36.01
Land 5/	65.50	79.62	91.57
Unpaid labor (27.58 hrs)	82.30	87.05	92.25
Total, economic costs	468.26	533.56	560.56
Residual returns to management and risk	-144.87	-173.34	-190.77

See footnotes at end of Table 55B.

Table 21A--U.S. cow-calf production cash costs and returns, operations with fewer than 100 cows, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Cash receipts:			
Steer calves (124.5 lbs) 1/	105.31	117.96	123.12
Heifer calves (85.2 lbs)	63.71	72.62	73.96
Feeder steers (88.6 lbs)	66.45	74.10	76.26
Feeder heifers (72.2 lbs)	51.11	56.79	58.57
Cull cows (75.3 lbs)	32.40	34.12	35.22
Total, cash receipts	318.98	355.59	367.13
Cash expenses:			
Feed--			
Grain (2.17 cwt)	6.74	9.82	10.16
Protein supplements (1.23 cwt)	13.61	15.87	16.70
Salt and minerals (0.33 cwt)	1.98	1.98	2.07
Hay (1.40 ton)	38.75	54.09	44.81
Silage (0.27 ton)	4.71	6.73	4.74
Pasture	25.97	28.69	30.47
Public grazing	.37	.38	.40
Other--			
Veterinary and medicine	6.75	6.95	7.48
Livestock hauling	1.53	1.56	1.66
Marketing	4.79	5.12	5.41
Custom feed mixing	.42	.43	.47
Fuel, lube, and electricity	15.45	15.32	17.89
Machinery and building repairs	26.39	27.51	28.61
Hired labor (1.41 hrs)	6.31	6.57	6.94
Miscellaneous	.19	.20	.21
Total, variable cash expenses	153.96	181.22	178.02
General farm overhead	38.28	49.78	53.82
Taxes and insurance	31.72	32.21	34.93
Interest	41.47	39.12	39.28
Total, fixed cash expenses	111.47	121.11	128.03
Total, cash expenses	265.43	302.33	306.05
Cash receipts less cash expenses	53.55	53.26	61.08
Capital replacement 2/	77.58	79.53	81.51
Total, cash expenses and replacement	343.01	381.86	387.56
Net cash returns	-24.03	-26.27	-20.43

Table 21B--U.S. cow-calf production economic costs and returns, operations with fewer than 100 cows, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Total, cash receipts	318.98	355.59	367.13
Economic (full ownership) costs:			
Variable cash expenses	153.96	181.22	178.02
General farm overhead	38.28	49.78	53.82
Taxes and insurance	31.72	32.21	34.93
Capital replacement	77.58	79.53	81.51
Operating capital 3/	4.66	6.27	7.16
Other nonland capital 4/	29.99	36.00	40.52
Land 5/	66.47	81.37	95.40
Unpaid labor (37.73 hrs)	113.25	119.80	127.93
Total, economic costs	515.91	586.18	619.29
Residual returns to management and risk	-196.93	-230.59	-252.16

See footnotes at end of Table 55B.

Table 22A--U.S. cow-calf production cash costs and returns, operations with 100-499 cows, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Cash receipts:			
Steer calves (105.1 lbs) 1/	89.84	100.77	103.24
Heifer calves (77.0 lbs)	59.72	68.18	67.78
Feeder steers (117.7 lbs)	89.58	99.61	100.92
Feeder heifers (78.3 lbs)	56.91	63.08	64.45
Cull cows (86.2 lbs)	37.33	39.32	39.86
Total, cash receipts	333.38	370.96	376.25
Cash expenses:			
Feed--			
Grain (2.39 cwt)	7.85	11.36	11.61
Protein supplements (1.82 cwt)	20.07	23.41	24.60
Salt and minerals (0.34 cwt)	1.96	1.96	2.01
Hay (1.22 ton)	26.21	36.10	29.41
Silage (0.37 ton)	6.80	9.11	6.47
Pasture	35.88	39.28	41.13
Public grazing	1.12	1.17	1.23
Crop residue	.23	.27	.27
Other--			
Veterinary and medicine	7.16	7.37	7.80
Livestock hauling	1.94	1.99	2.13
Marketing	3.88	4.15	4.31
Custom feed mixing	.14	.14	.12
Fuel, lube, and electricity	11.30	11.30	12.92
Machinery and building repairs	18.05	18.97	19.28
Hired labor (4.39 hrs)	19.65	20.47	20.95
Miscellaneous	.35	.38	.39
Total, variable cash expenses	162.59	187.43	184.63
General farm overhead	40.01	51.93	55.16
Taxes and insurance	28.69	30.45	32.16
Interest	43.34	40.81	40.26
Total, fixed cash expenses	112.04	123.19	127.58
Total, cash expenses	274.63	310.62	312.21
Cash receipts less cash expenses	58.75	60.34	64.04
Capital replacement 2/	53.82	55.53	55.32
Total, cash expenses and replacement	328.45	366.15	367.53
Net cash returns	4.93	4.81	8.72

Table 22B--U.S. cow-calf production economic costs and returns, operations with 100-499 cows, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Total, cash receipts	333.38	370.96	376.25
Economic (full ownership) costs:			
Variable cash expenses	162.59	187.43	184.63
General farm overhead	40.01	51.93	55.16
Taxes and insurance	28.69	30.45	32.16
Capital replacement	53.82	55.53	55.32
Operating capital 3/	4.92	6.49	7.42
Other nonland capital 4/	23.92	28.84	31.69
Land 5/	72.59	87.59	97.65
Unpaid labor (20.54 hrs)	60.50	63.79	66.80
Total, economic costs	447.04	512.05	530.83
Residual returns to management and risk	-113.66	-141.09	-154.58

See footnotes at end of Table 55B.

Table 23A--U.S. cow-calf production cash costs and returns, operations with 500 or more cows, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Cash receipts:			
Steer calves (81 lbs) 1/	67.40	75.13	78.30
Heifer calves (61.1 lbs)	45.72	52.08	52.63
Feeder steers (145.4 lbs)	106.85	119.66	123.40
Feeder heifers (87.3 lbs)	61.37	68.30	71.04
Cull cows (86.9 lbs)	36.86	38.78	40.17
Total, cash receipts	318.20	353.95	365.54
Cash expenses:			
Feed--			
Grain (0.8 cwt)	3.02	4.19	4.62
Protein supplements (1.52 cwt)	15.94	18.64	19.57
Salt and minerals (0.34 cwt)	2.00	2.01	2.09
Hay (0.7 ton)	18.23	24.15	21.31
Silage (0.14 ton)	2.51	3.10	2.25
Pasture	44.25	48.25	51.19
Public grazing	1.11	1.17	1.25
Other--			
Veterinary and medicine	5.62	5.77	6.22
Livestock hauling	2.84	2.92	3.11
Marketing	3.06	3.28	3.45
Bedding	.05	.05	.05
Custom feed mixing	.05	.05	.06
Fuel, lube, and electricity	6.08	6.20	7.21
Machinery and building repairs	13.31	13.85	14.45
Hired labor (7.16 hrs)	32.95	34.34	35.66
Miscellaneous	.02	.02	.02
Total, variable cash expenses	151.04	167.99	172.51
General farm overhead	38.18	49.55	53.59
Taxes and insurance	20.11	21.43	22.97
Interest	41.36	38.93	39.11
Total, fixed cash expenses	99.65	109.91	115.67
Total, cash expenses	250.69	277.90	288.18
Cash receipts less cash expenses	67.51	76.05	77.36
Capital replacement 2/	41.87	43.10	44.39
Total, cash expenses and replacement	292.56	321	332.57
Net cash returns	25.64	32.95	32.97

Table 23B--U.S. cow-calf production economic costs and returns, operations with 500 or more cows, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Total, cash receipts	318.2	353.95	365.54
Economic (full ownership) costs:			
Variable cash expenses	151.04	167.99	172.51
General farm overhead	38.18	49.55	53.59
Taxes and insurance	20.11	21.43	22.97
Capital replacement	41.87	43.10	44.39
Operating capital 3/	4.57	5.81	6.94
Other nonland capital 4/	21.29	25.67	28.98
Land 5/	46.62	55.81	64.22
Unpaid labor (5.74 hrs)	16.48	17.25	18.15
Total, economic costs	340.16	386.61	411.75
Residual returns to management and risk	-21.96	-32.66	-46.21

See footnotes at end of Table 55B.

Table 24A--Cow-calf production cash costs and returns, all sizes of operation, Great-Plains, 1987-89

Item	1987	1988	1989
	Dollars per cow		
Cash receipts:			
Steer calves (104.5 lbs) 1/	88.13	98.68	102.92
Heifer calves (82 lbs)	63.52	72.38	73.59
Feeder steers (121.8 lbs)	94.39	105.03	108.16
Feeder heifers (84.6 lbs)	62.95	69.71	72.02
Cull cows (62.4 lbs)	25.77	27.21	28.10
Total, cash receipts	334.76	373.01	384.79
Cash expenses:			
Feed--			
Grain (1.86 cwt)	6.18	9.07	8.77
Protein supplements (2.28 cwt)	23.98	27.89	29.54
Salt and minerals (0.35 cwt)	1.96	1.96	2.05
Hay (1.09 ton)	24.09	33.27	26.92
Silage (0.38 ton)	6.89	8.15	6.25
Pasture	30.29	32.81	35.40
Public grazing	.91	.94	.95
Crop residue	.18	.21	.22
Other--			
Veterinary and medicine	6.68	6.88	7.40
Livestock hauling	1.64	1.67	1.79
Marketing	5.12	5.48	5.78
Bedding	.02	.02	.02
Fuel, lube, and electricity	13.31	13.08	15.42
Machinery and building repairs	19.78	20.86	21.79
Hired labor (3.05 hrs)	12.82	13.08	13.85
Miscellaneous	.55	.58	.61
Total, variable cash expenses	154.40	175.95	176.76
General farm overhead	40.17	52.22	56.41
Taxes and insurance	23.45	25.54	26.86
Interest	43.52	41.03	41.17
Total, fixed cash expenses	107.14	118.79	124.44
Total, cash expenses	261.54	294.74	301.20
Cash receipts less cash expenses	73.22	78.27	83.59
Capital replacement 2/	58.02	59.62	61.28
Total, cash expenses and replacement	319.56	354.36	362.48
Net cash returns	15.20	18.65	22.31

Table 24B--Cow-calf production economic costs and returns, all sizes of operation, Great Plains, 1987-89

Item	1987	1988	1989
	Dollars per cow		
Total, cash receipts	334.76	373.01	384.79
Economic (full ownership) costs:			
Variable cash expenses	154.40	175.95	176.76
General farm overhead	40.17	52.22	56.41
Taxes and insurance	23.45	25.54	26.86
Capital replacement	58.02	59.62	61.28
Operating capital 3/	4.67	6.09	7.11
Other nonland capital 4/	24.51	29.43	33.17
Land 5/	63.74	76.15	84.38
Unpaid labor (22.67 hrs)	72.51	74.75	79.86
Total, economic costs	441.47	499.75	525.83
Residual returns to management and risk	-106.71	-126.74	-141.04

See footnotes at end of Table 55B.

Table 25A--Cow-calf production cash costs and returns, all sizes of operation, North-Central, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Cash receipts:			
Steer calves (121 lbs) 1/	101.84	114.24	119.14
Heifer calves (74 lbs)	55.03	62.76	63.81
Feeder steers (96.1 lbs)	71.98	79.93	82.36
Feeder heifers (80.8 lbs)	56.01	62.01	64.05
Cull cows (99.9 lbs)	44.23	46.64	48.20
Total, cash receipts	329.09	365.58	377.56
Cash expenses:			
Feed--			
Grain (2.43 cwt)	6.47	9.41	10.08
Protein supplements (1.02 cwt)	12.48	14.53	15.37
Salt and minerals (0.32 cwt)	2.01	2.02	2.10
Hay (1.46 ton)	41.26	67.66	55.71
Silage (0.45 ton)	7.26	14.13	9.54
Pasture	12.61	14.79	15.48
Other--			
Veterinary and medicine	6.43	6.62	7.13
Livestock hauling	2.02	2.07	2.21
Marketing	2.77	2.96	3.12
Custom feed mixing	.13	.14	.15
Fuel, lube, and electricity	12.29	11.86	13.80
Machinery and building repairs	23.28	24.09	24.95
Hired labor (0.86 hr)	3.86	4.01	4.09
Total, variable cash expenses	132.87	174.29	163.73
General farm overhead	39.49	51.18	55.35
Taxes and insurance	50.72	47.57	54.51
Interest	42.78	40.21	40.40
Total, fixed cash expenses	132.99	138.96	150.26
Total, cash expenses	265.86	313.25	313.99
Cash receipts less cash expenses	63.23	52.33	63.57
Capital replacement 2/	73.10	74.60	76.50
Total, cash expenses and replacement	338.96	387.85	390.49
Net cash returns	-9.87	-22.27	-12.93

Table 25B--Cow-calf production economic costs and returns, all sizes of operation, North-Central, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Total, cash receipts	329.09	365.58	377.56
Economic (full ownership) costs:			
Variable cash expenses	132.87	174.29	163.73
General farm overhead	39.49	51.18	55.35
Taxes and insurance	50.72	47.57	54.51
Capital replacement	73.10	74.60	76.50
Operating capital 3/	4.02	6.03	6.58
Other nonland capital 4/	30.70	36.95	41.62
Land 5/	60.92	78.49	99.88
Unpaid labor (34.8 hrs)	104.13	110.62	121.15
Total, economic costs	495.95	579.73	619.32
Residual returns to management and risk	-166.86	-214.15	-241.76

See footnotes at end of Table 55B.

Table 26A--Cow-calf production cash costs and returns, all sizes of operation, South, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Cash receipts:			
Steer calves (130.8 lbs) 1/	113.58	127.55	130.02
Heifer calves (87.9 lbs)	64.43	73.59	72.43
Feeder steers (51 lbs)	37.33	41.52	40.10
Feeder heifers (39.4 lbs)	25.67	28.53	28.36
Cull cows (85 lbs)	38.73	40.81	40.92
Total, cash receipts	279.74	312.00	311.83
Cash expenses:			
Feed--			
Grain (2.38 cwt)	7.80	11.42	11.95
Protein supplements (0.74 cwt)	8.96	10.31	10.66
Salt and minerals (0.26 cwt)	1.93	1.94	1.96
Hay (1.19 ton)	39.00	47.90	37.96
Silage (0.19 ton)	3.77	4.50	2.82
Pasture	47.44	53.97	55.41
Crop residue	0	0	0
Other--			
Veterinary and medicine	6.31	6.48	6.75
Livestock hauling	1.00	1.02	1.08
Marketing	3.87	4.14	4.26
Custom feed mixing	1.26	1.32	1.38
Fuel, lube, and electricity	13.60	13.69	15.52
Machinery and building repairs	25.98	27.03	27.24
Hired labor (3.34 hrs)	16.41	17.46	17.15
Total, variable cash expenses	177.33	201.18	194.14
General farm overhead	33.57	43.68	45.71
Taxes and insurance	26.43	27.87	29.19
Interest	36.37	34.32	33.36
Total, fixed cash expenses	96.37	105.87	108.26
Total, cash expenses	273.70	307.05	302.40
Cash receipts less cash expenses	6.04	4.95	9.43
Capital replacement 2/	80.81	82.89	82.64
Total, cash expenses and replacement	354.51	389.94	385.04
Net cash returns	-74.77	-77.94	-73.21

Table 26B--Cow-calf production economic costs and returns, all sizes of operation, South, 1987-89

Item	1987	1988	1989
		Dollars per cow	
Total, cash receipts	279.74	312.00	311.83
Economic (full ownership) costs:			
Variable cash expenses	177.33	201.18	194.14
General farm overhead	33.57	43.68	45.71
Taxes and insurance	26.43	27.87	29.19
Capital replacement	80.81	82.89	82.64
Operating capital 3/	5.36	6.96	7.80
Other nonland capital 4/	31.28	37.72	41.30
Land 5/	92.47	112.90	129.01
Unpaid labor (33.03 hrs)	86.48	95.46	97.52
Total, economic costs	533.73	608.66	627.31
Residual returns to management and risk	-253.99	-296.66	-315.48

See footnotes at end of Table 55B.

Table 27A--Cow-calf production cash costs and returns, all sizes of operation, West, 1987-89

Item	1987	1988	1989
	Dollars per cow		
Cash receipts:			
Steer calves (102.1 lbs) 1/	84.84	95.24	99.49
Heifer calves (70.4 lbs)	53.20	60.73	61.80
Feeder steers (133.5 lbs)	97.34	108.06	111.32
Feeder heifers (90.4 lbs)	63.90	70.71	73.15
Cull cows (92.5 lbs)	38.77	40.86	42.19
Total, cash receipts	338.05	375.60	387.95
Cash expenses:			
Feed--			
Grain (1.78 cwt)	6.13	8.62	9.53
Protein supplements (1.02 cwt)	11.25	13.11	13.85
Salt and minerals (0.36 cwt)	2.02	2.02	2.11
Hay (1.36 ton)	31.39	41.55	37.31
Silage (0.09 ton)	1.67	1.97	1.46
Pasture	34.67	36.91	38.89
Public grazing	1.52	1.60	1.71
Other--			
Veterinary and medicine	7.34	7.55	8.13
Livestock hauling	2.81	2.87	3.06
Marketing	4.18	4.45	4.69
Fuel, lube, and electricity	11.46	11.89	13.59
Machinery and building repairs	20.61	21.60	22.40
Hired labor (5.05 hrs)	23.23	24.45	25.39
Total, variable cash expenses	158.28	178.59	182.12
General farm overhead	40.57	52.58	56.87
Taxes and insurance	24.84	26.76	28.20
Interest	43.95	41.32	41.51
Total, fixed cash expenses	109.36	120.66	126.58
Total, cash expenses	267.64	299.25	308.70
Cash receipts less cash expenses	70.41	76.35	79.25
Capital replacement 2/	56.31	58.75	59.73
Total, cash expenses and replacement	323.95	358.00	368.43
Net cash returns	14.10	17.60	19.52

Table 27B--Cow-calf production economic costs and returns, all sizes of operation, West, 1987-89

Item	1987	1988	1989
	Dollars per cow		
Total, cash receipts	338.05	375.60	387.95
Economic (full ownership) costs:			
Variable cash expenses	158.28	178.59	182.12
General farm overhead	40.57	52.58	56.87
Taxes and insurance	24.84	26.76	28.20
Capital replacement	56.31	58.75	59.73
Operating capital 3/	4.79	6.18	7.32
Other nonland capital 4/	23.88	28.83	32.39
Land 5/	48.50	58.06	66.59
Unpaid labor (25.8 hrs)	79.11	83.41	88.01
Total, economic costs	436.28	493.16	521.23
Residual returns to management and risk	-98.23	-117.56	-133.28

See footnotes at end of Table 55B.

Table 28A--U.S. farrow-to-finish production cash costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Cash receipts:			
Cull sows (5.6 lbs) 1/	2.37	1.79	1.95
Slaughter hogs (94.4 lbs)	48.48	40.70	41.31
Total	50.85	42.49	43.26
Cash expenses:			
Feed--			
Grain (348.3 lbs)	9.68	14.09	15.15
Protein supplements (81.2 lbs)	10.31	12.87	12.91
Pasture (0.01 ac)	.03	.04	.03
Other--			
Veterinary and medicine	.56	.57	.61
Livestock hauling	.13	.13	.13
Marketing	.36	.38	.40
Bedding (12 lbs)	.15	.15	.16
Fuel, lube, and electricity	1.64	1.66	1.96
Machinery and building repairs	2.34	2.41	2.50
Hired labor (0.19 hr)	1.26	1.37	1.47
Manure credit	-.17	-.19	-.20
Total, variable cash expenses	26.29	33.48	35.12
General farm overhead	4.07	4.67	4.98
Taxes and insurance	.74	.73	.74
Interest	3.56	4.25	4.21
Total, fixed cash expenses	8.37	9.65	9.93
Total, cash expenses	34.66	43.13	45.05
Cash receipts less cash expenses	16.19	-.64	-1.79
Capital replacement 2/	5.59	5.55	5.74
Total, cash expenses and replacement	40.25	48.68	50.79
Net cash returns	10.60	-6.19	-7.53

Table 28B--U.S. farrow-to-finish production economic costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Total, cash receipts	50.85	42.49	43.26
Economic (full ownership) costs:			
Variable cash expenses	26.29	33.48	35.12
General farm overhead	4.07	4.67	4.98
Taxes and insurance	.74	.73	.74
Capital replacement	5.59	5.55	5.74
Operating capital 3/	.40	.58	.71
Other nonland capital 4/	1.21	1.38	1.57
Land 5/	.06	.08	.10
Unpaid labor (0.9 hr)	4.50	4.64	5.05
Total, economic costs	42.86	51.11	54.01
Residual returns to management and risk	7.99	-8.62	-10.75

See footnotes at end of Table 55B.

Table 29A--U.S. farrow-to-finish production cash costs and returns, 140-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (5.4 lbs) 1/	2.23	1.68	1.82
Slaughter hogs (94.6 lbs)	48.31	40.57	41.21
Total	50.54	42.25	43.03
Cash expenses:			
Feed--			
Grain (354.6 lbs)	10.03	14.65	15.83
Protein supplements (80.4 lbs)	11.08	13.82	13.80
Pasture (0.03 ac)	.13	.19	.16
Other--			
Veterinary and medicine	.61	.63	.68
Livestock hauling	.15	.15	.15
Marketing	.56	.60	.65
Bedding (16 lbs)	.19	.19	.20
Fuel, lube, and electricity	1.84	1.85	2.23
Machinery and building repairs	2.76	2.86	2.96
Hired labor (0.13 hr)	.52	.56	.63
Manure credit	-.14	-.15	-.15
Total, variable cash expenses	27.73	35.35	37.14
General farm overhead	4.04	4.65	4.96
Taxes and insurance	.91	.91	.92
Interest	3.54	4.23	4.19
Total, fixed cash expenses	8.49	9.79	10.07
Total, cash expenses	36.22	45.14	47.21
Cash receipts less cash expenses	14.32	-2.89	-4.18
Capital replacement 2/	6.84	6.88	7.04
Total, cash expenses and replacement	43.06	52.02	54.25
Net cash returns	7.48	-9.77	-11.22

Table 29B--U.S. farrow-to-finish production economic costs and returns, 140-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	50.54	42.25	43.03
Economic (full ownership) costs:			
Variable cash expenses	27.73	35.35	37.14
General farm overhead	4.04	4.65	4.96
Taxes and insurance	.91	.91	.92
Capital replacement	6.84	6.88	7.04
Operating capital 3/	.42	.61	.75
Other nonland capital 4/	1.49	1.72	1.93
Land 5/	.28	.36	.46
Unpaid labor (2.22 hrs)	9.72	10.17	10.91
Total, economic costs	51.43	60.65	64.11
Residual returns to management and risk	-.89	-18.40	-21.08

See footnotes at end of Table 55B.

Table 30A--U.S. farrow-to-finish production cash costs and returns, 300-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (5.9 lbs) 1/	2.54	1.91	2.07
Slaughter hogs (94.1 lbs)	48.51	40.73	41.34
Total	51.05	42.64	43.41
Cash expenses:			
Feed--			
Grain (353.8 lbs)	9.75	14.22	15.31
Protein supplements (80.4 lbs)	11.08	13.83	13.81
Pasture (0.02 ac)	.06	.09	.08
Other--			
Veterinary and medicine	.71	.73	.78
Livestock hauling	.20	.21	.21
Marketing	.42	.45	.48
Bedding (22,lbs)	.24	.24	.26
Fuel, lube, and electricity	1.48	1.49	1.86
Machinery and building repairs	2.50	2.58	2.66
Hired labor (0.09 hr)	.41	.44	.47
Manure credit	-.16	-.17	-.18
Total, variable cash expenses	26.69	34.11	35.74
General farm overhead	4.08	4.69	5.00
Taxes and insurance	.79	.78	.79
Interest	3.57	4.26	4.22
Total, fixed cash expenses	8.44	9.73	10.01
Total, cash expenses	35.13	43.84	45.75
Cash receipts less cash expenses	15.92	-1.20	-2.34
Capital replacement 2/	6.67	6.65	6.83
Total, cash expenses and replacement	41.80	50.49	52.58
Net cash returns	9.25	-7.85	-9.17

Table 30B--U.S. farrow-to-finish production economic costs and returns, 300-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	51.05	42.64	43.41
Economic (full ownership) costs:			
Variable cash expenses	26.69	34.11	35.74
General farm overhead	4.08	4.69	5.00
Taxes and insurance	.79	.78	.79
Capital replacement	6.67	6.65	6.83
Operating capital 3/	.40	.59	.72
Other nonland capital 4/	1.38	1.58	1.79
Land 5/	.13	.18	.22
Unpaid labor (1.58 hrs)	6.80	7.19	7.82
Total, economic costs	46.94	55.77	58.91
Residual returns to management and risk	4.11	-13.13	-15.50

See footnotes at end of Table 55B.

Table 31A--U.S. farrow-to-finish production cash costs and returns, 650-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (5.7 lbs) 1/	2.45	1.85	2.02
Slaughter hogs (94.3 lbs)	48.37	40.61	41.21
Total	50.82	42.46	43.23
Cash expenses:			
Feed--			
Grain (353.2 lbs)	9.72	14.15	15.19
Protein supplements (80.8 lbs)	10.95	13.72	13.72
Pasture (0.01 ac)	.04	.06	.05
Other--			
Veterinary and medicine	.78	.80	.86
Livestock hauling	.13	.13	.14
Marketing	.41	.44	.46
Bedding (18 lbs)	.21	.21	.23
Fuel, lube, and electricity	1.76	1.77	2.15
Machinery and building repairs	2.36	2.45	2.54
Hired labor (0.12 hr)	.54	.57	.62
Manure credit	-.16	-.18	-.19
Total, variable cash expenses	26.74	34.12	35.77
General farm overhead	4.07	4.67	4.98
Taxes and insurance	.73	.72	.72
Interest	3.56	4.25	4.21
Total, fixed cash expenses	8.36	9.64	9.91
Total, cash expenses	35.10	43.76	45.68
Cash receipts less cash expenses	15.72	-1.30	-2.45
Capital replacement 2/	5.80	5.83	6.05
Total, cash expenses and replacement	40.90	49.59	51.73
Net cash returns	9.92	-7.13	-8.50

Table 31B--U.S. farrow-to-finish production economic costs, 650-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	50.82	42.46	43.23
Economic (full ownership) costs:			
Variable cash expenses	26.74	34.12	35.77
General farm overhead	4.07	4.67	4.98
Taxes and insurance	.73	.72	.72
Capital replacement	5.80	5.83	6.05
Operating capital 3/	.40	.59	.72
Other nonland capital 4/	1.19	1.38	1.57
Land 5/	.08	.11	.13
Unpaid labor (1.02 hrs)	4.34	4.60	5.01
Total, economic costs	43.35	52.02	54.95
Residual returns to management and risk	7.47	-9.56	-11.72

See footnotes at end of Table 55B.

Table 32A--U.S. farrow-to-finish production cash costs and returns, 1,600-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (5.6 lbs) 1/	2.38	1.80	1.96
Slaughter hogs (94.4 lbs)	48.47	40.69	41.30
Total	50.85	42.49	43.26
Cash expenses:			
Feed--			
Grain (345.9 lbs)	9.54	13.89	14.91
Protein supplements (85 lbs)	10.93	14.01	14.02
Pasture (0.01 ac)	0	.01	0
Other--			
Veterinary and medicine	.31	.32	.35
Livestock hauling	.11	.11	.12
Marketing	.38	.41	.43
Bedding (12 lbs)	.15	.16	.17
Fuel, lube, and electricity	1.49	1.50	1.79
Machinery and building repairs	2.42	2.49	2.57
Hired labor (0.23 hr)	1.38	1.46	1.59
Manure credit	-.16	-.18	-.18
Total, variable cash expenses	26.55	34.18	35.77
General farm overhead	4.07	4.67	4.98
Taxes and insurance	.81	.80	.81
Interest	3.56	4.25	4.21
Total, fixed cash expenses	8.44	9.72	10.00
Total, cash expenses	34.99	43.90	45.77
Cash receipts less cash expenses	15.86	-1.41	-2.51
Capital replacement 2/	5.68	5.68	5.86
Total, cash expenses and replacement	40.67	49.58	51.63
Net cash returns	10.18	-7.09	-8.37

Table 32B--U.S. farrow-to-finish production economic costs and returns, 1,600-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	50.85	42.49	43.26
Economic (full ownership) costs:			
Variable cash expenses	26.55	34.18	35.77
General farm overhead	4.07	4.67	4.98
Taxes and insurance	.81	.80	.81
Capital replacement	5.68	5.68	5.86
Operating capital 3/	.40	.59	.72
Other nonland capital 4/	1.28	1.48	1.67
Land 5/	.01	.01	.02
Unpaid labor (0.74 hr)	4.29	4.54	4.94
Total, economic costs	43.09	51.95	54.77
Residual returns to management and risk	7.76	-9.46	-11.51

See footnotes at end of Table 55B.

Table 33A--U.S. farrow-to-finish production cash costs and returns, 3,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (5.3 lbs) 1/	2.28	1.72	1.87
Slaughter hogs (94.7 lbs)	48.57	40.78	41.39
Total	50.85	42.50	43.26
Cash expenses:			
Feed--			
Grain (348 lbs)	9.72	14.16	15.21
Protein supplements (80 lbs)	9.09	11.18	11.31
Other--			
Veterinary and medicine	.38	.40	.43
Livestock hauling	.07	.07	.07
Marketing	.23	.24	.26
Bedding (4 lbs)	.05	.05	.05
Fuel, lube, and electricity	1.59	1.61	1.84
Machinery and building repairs	2.31	2.40	2.49
Hired labor (0.23 hr)	1.85	1.95	2.12
Manure credit	-.15	-.16	-.17
Total, variable cash expenses	25.14	31.90	33.61
General farm overhead	4.07	4.68	4.98
Taxes and insurance	.67	.66	.67
Interest	3.56	4.25	4.21
Total, fixed cash expenses	8.30	9.59	9.86
Total, cash expenses	33.44	41.49	43.47
Cash receipts less cash expenses	17.41	1.01	-.21
Capital replacement 2/	4.84	4.86	5.04
Total, cash expenses and replacement	38.28	46.35	48.51
Net cash returns	12.57	-3.85	-5.25

Table 33B--U.S. farrow-to-finish production economic costs and returns, 3,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	50.85	42.5	43.26
Economic (full ownership) costs:			
Variable cash expenses	25.14	31.90	33.61
General farm overhead	4.07	4.68	4.98
Taxes and insurance	.67	.66	.67
Capital replacement	4.84	4.86	5.04
Operating capital 3/	.38	.55	.68
Other nonland capital 4/	1.07	1.23	1.40
Land 5/	.01	.01	.01
Unpaid labor (0.43 hr)	3.51	3.69	4.01
Total, economic costs	39.69	47.58	50.40
Residual returns to management and risk	11.16	-5.08	-7.14

See footnotes at end of Table 55B.

Table 34A--U.S. farrow-to-finish production cash costs and returns, 10,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (5.3 lbs) 1/	2.26	1.71	1.85
Slaughter hogs (94.7 lbs)	48.58	40.78	41.39
Total	50.84	42.49	43.24
Cash expenses:			
Feed--			
Grain (336.5 lbs)	9.55	13.90	14.93
Protein supplements (77.8 lbs)	8.50	10.46	10.58
Other--			
Veterinary and medicine	.67	.69	.75
Livestock hauling	.13	.13	.14
Marketing	.23	.24	.26
Bedding (2 lbs)	.04	.04	.04
Fuel, lube, and electricity	1.87	1.90	2.12
Machinery and building repairs	1.82	1.87	1.93
Hired labor (0.32 hr)	2.76	2.92	3.15
Manure credit	-.29	-.32	-.33
Total, variable cash expenses	25.28	31.83	33.57
General farm overhead	4.07	4.67	4.98
Taxes and insurance	.60	.59	.60
Interest	3.56	4.25	4.21
Total, fixed cash expenses	8.23	9.51	9.79
Total, cash expenses	33.51	41.34	43.36
Cash receipts less cash expenses	17.33	1.15	-.12
Capital replacement 2/	4.22	4.15	4.30
Total, cash expenses and replacement	37.73	45.49	47.66
Net cash returns	13.11	-3.00	-4.42

Table 34B--U.S. farrow-to-finish production economic costs and returns, 10,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	50.84	42.49	43.24
Economic (full ownership) costs:			
Variable cash expenses	25.28	31.83	33.57
General farm overhead	4.07	4.67	4.98
Taxes and insurance	.60	.59	.60
Capital replacement	4.22	4.15	4.30
Operating capital 3/	.38	.55	.68
Other nonland capital 4/	.94	1.07	1.21
Land 5/	0	0	.01
Unpaid labor (0.13 hr)	1.07	1.12	1.21
Total, economic costs	36.56	43.98	46.56
Residual returns to management and risk	14.28	-1.49	-3.32

See footnotes at end of Table 55B.

Table 35A--Farrow-to-finish production cash costs and returns, all sizes of operation, North-Central, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (5.8 lbs) 1/	2.47	1.87	2.04
Slaughter hogs (94.2 lbs)	48.38	40.62	41.22
Total	50.85	42.49	43.26
Cash expenses:			
Feed--			
Grain (348.7 lbs)	9.47	13.75	14.75
Protein supplements (80.8 lbs)	10.25	12.74	12.78
Pasture (0.01 ac)	.02	.03	.02
Other--			
Veterinary and medicine	.55	.55	.60
Livestock hauling	.14	.14	.15
Marketing	.36	.38	.40
Bedding (14 lbs)	.16	.16	.18
Fuel, lube, and electricity	1.61	1.62	1.93
Machinery and building repairs	2.39	2.46	2.55
Hired labor (0.17 hr)	1.17	1.28	1.38
Manure credit	-.20	-.22	-.23
Total, variable cash expenses	25.92	32.89	34.51
General farm overhead	4.07	4.67	4.98
Taxes and insurance	.75	.74	.74
Interest	3.56	4.25	4.21
Total, fixed cash expenses	8.38	9.66	9.93
Total, cash expenses	34.30	42.55	44.44
Cash receipts less cash expenses	16.55	-.06	-1.18
Capital replacement 2/	5.72	5.69	5.89
Total, cash expenses and replacement	40.02	48.24	50.33
Net cash returns	10.83	-5.75	-7.07

Table 35B--Farrow-to-finish production economic costs and returns, all sizes of operation, North-Central, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	50.85	42.49	43.26
Economic (full ownership) costs:			
Variable cash expenses	25.92	32.89	34.51
General farm overhead	4.07	4.67	4.98
Taxes and insurance	.75	.74	.74
Capital replacement	5.72	5.69	5.89
Operating capital 3/	.39	.57	.69
Other nonland capital 4/	1.23	1.41	1.60
Land 5/	.05	.06	.08
Unpaid labor (0.91 hr)	4.54	4.72	5.16
Total, economic costs	42.67	50.75	53.65
Residual returns to management and risk	8.18	-8.26	-10.39

See footnotes at end of Table 55B.

Table 36A--Farrow-to-finish production cash costs and returns, all sizes of operation, Southeast, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (4.1 lbs) 1/	1.66	1.26	1.37
Slaughter hogs (95.9 lbs)	49.12	41.23	41.84
Total	50.78	42.49	43.21
Cash expenses:			
Feed--			
Grain (346.4 lbs)	11.19	16.31	17.50
Protein supplements (83.5 lbs)	10.78	13.71	13.73
Pasture (0.01 ac)	.09	.11	.09
Other--			
Veterinary and medicine	.64	.66	.70
Livestock hauling	.06	.06	.06
Marketing	.37	.39	.41
Bedding (4 lbs)	.04	.05	.05
Fuel, lube, and electricity	1.92	1.95	2.17
Machinery and building repairs	2.01	2.09	2.18
Hired labor (0.3 hr)	1.91	1.94	2.02
Total, variable cash expenses	29.01	37.27	38.91
General farm overhead	4.06	4.67	4.98
Taxes and insurance	.72	.71	.72
Interest	3.56	4.25	4.20
Total, fixed cash expenses	8.34	9.63	9.90
Total, cash expenses	37.35	46.90	48.81
Cash receipts less cash expenses	13.43	-4.41	-5.60
Capital replacement 2/	4.66	4.66	4.84
Total, cash expenses and replacement	42.01	51.56	53.65
Net cash returns	8.77	-9.07	-10.44

Table 36B--Farrow-to-finish production economic costs and returns, all sizes of operation, Southeast, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	50.78	42.49	43.21
Economic (full ownership) costs:			
Variable cash expenses	29.01	37.27	38.91
General farm overhead	4.06	4.67	4.98
Taxes and insurance	.72	.71	.72
Capital replacement	4.66	4.66	4.84
Operating capital 3/	.44	.64	.78
Other nonland capital 4/	1.04	1.19	1.36
Land 5/	.15	.17	.20
Unpaid labor (0.83 hr)	4.16	4.13	4.35
Total, economic costs	44.24	53.44	56.14
Residual returns to management and risk	6.54	-10.95	-12.93

See footnotes at end of Table 55B.

Table 37A--U.S. feeder pig production cash costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (18.9 lbs) 1/	8.07	6.08	6.58
Feeder pigs (81.1 lbs)	78.72	60.63	55.50
Total	86.79	66.71	62.08
Cash expenses:			
Feed--			
Grain (427.4 lbs)	12.03	17.46	18.75
Protein supplements (117 lbs)	16.39	20.63	20.65
Pasture (0.04 ac)	.12	.17	.15
Other--			
Veterinary and medicine	1.51	1.50	1.62
Livestock hauling	.19	.19	.21
Marketing	1.66	1.76	1.89
Bedding (34 lbs)	.37	.37	.41
Custom feed mixing	1.19	1.18	1.23
Fuel, lube, and electricity	6.36	6.33	7.35
Machinery and building repairs	4.72	4.85	5.06
Hired labor (0.44 hr)	3.10	3.38	3.59
Manure credit	-.13	-.15	-.15
Total, variable cash expenses	47.51	57.67	60.76
General farm overhead	6.94	7.34	7.15
Taxes and insurance	1.88	1.82	1.87
Interest	6.08	6.67	6.04
Total, fixed cash expenses	14.90	15.83	15.06
Total, cash expenses	62.41	73.50	75.82
Cash receipts less cash expenses	24.38	-6.79	-13.74
Capital replacement 2/	11.68	11.50	12.00
Total, cash expenses and replacement	74.09	85.00	87.82
Net cash returns	12.70	-18.29	-25.74

Table 37B--U.S. feeder pig production economic costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	86.79	66.71	62.08
Economic (full ownership) costs:			
Variable cash expenses	47.51	57.67	60.76
General farm overhead	6.94	7.34	7.15
Taxes and insurance	1.88	1.82	1.87
Capital replacement	11.68	11.50	12.00
Operating capital 3/	.72	1.00	1.22
Other nonland capital 4/	2.77	3.10	3.55
Land 5/	.32	.38	.49
Unpaid labor (3.43 hrs)	17.23	17.76	19.34
Total, economic costs	89.05	100.57	106.38
Residual returns to management and risk	-2.26	-33.86	-44.30

See footnotes at end of Table 55B.

Table 38A--U.S. feeder pig production cash costs and returns, 140-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (19.2 lbs) 1/	8.38	6.28	6.66
Feeder pigs (80.8 lbs)	75.53	58.33	53.83
Total	83.91	64.61	60.49
Cash expenses:			
Feed--			
Grain (466.7 lbs)	13.48	19.65	21.15
Protein supplements (119.1 lbs)	16.53	20.57	20.42
Pasture (0.04 ac)	.51	.67	.62
Other--			
Veterinary and medicine	2.98	3.03	3.18
Marketing	1.70	1.87	2.09
Bedding	.36	.38	.42
Custom feed mixing	5.64	5.94	6.55
Fuel, lube, and electricity	5.80	5.85	7.34
Machinery and building repairs	5.81	6.08	6.35
Hired labor (0.15 hr)	.54	.58	.69
Total, variable cash expenses	53.35	64.62	68.81
General farm overhead	6.71	7.11	6.97
Taxes and insurance	2.02	1.98	1.99
Interest	5.87	6.46	5.89
Total, fixed cash expenses	14.60	15.55	14.85
Total, cash expenses	67.95	80.17	83.66
Cash receipts less cash expenses	15.96	-15.56	-23.17
Capital replacement 2/	13.06	13.08	13.66
Total, cash expenses and replacement	81.01	94.25	97.32
Net cash returns	2.90	-28.64	-36.83

Table 38B--U.S. feeder pig production economic costs and returns, 140-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	83.91	64.61	60.49
Economic (full ownership) costs:			
Variable cash expenses	53.35	64.62	68.81
General farm overhead	6.71	7.11	6.97
Taxes and insurance	2.02	1.98	1.99
Capital replacement	13.06	13.08	13.66
Operating capital 3/	.81	1.12	1.38
Other nonland capital 4/	3.07	3.50	4.03
Land 5/	.59	.75	.98
Unpaid labor (7.74 hrs)	33.95	35.47	38.35
Total, economic costs	113.56	127.63	136.17
Residual returns to management and risk	-29.65	-63.02	-75.68

See footnotes at end of Table 55B.

Table 39A--U.S. feeder pig production cash costs and returns, 300-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (20.6 lbs) 1/	8.78	6.61	7.11
Feeder pigs (79.4 lbs)	77.16	59.43	54.46
Total	85.94	66.04	61.57
Cash expenses:			
Feed--			
Grain (467.3 lbs)	13.05	18.98	20.36
Protein supplements (118.9 lbs)	16.53	20.55	20.41
Pasture (0.17 ac)	.26	.42	.35
Other--			
Veterinary and medicine	3.74	3.79	3.98
Livestock hauling	.40	.40	.41
Marketing	1.74	1.90	2.05
Bedding (74 lbs)	.82	.84	.88
Custom feed mixing	2.65	2.68	2.79
Fuel, lube, and electricity	10.29	10.29	11.66
Machinery and building repairs	5.87	6.13	6.41
Hired labor (0.12 hr)	.38	.45	.56
Manure credit	-.15	-.16	-.17
Total, variable cash expenses	55.58	66.27	69.69
General farm overhead	6.88	7.26	7.09
Taxes and insurance	2.64	2.56	2.66
Interest	6.02	6.60	5.99
Total, fixed cash expenses	15.54	16.42	15.74
Total, cash expenses	71.12	82.69	85.43
Cash receipts less cash expenses	14.82	-16.65	-23.86
Capital replacement 2/	13.93	13.96	14.57
Total, cash expenses and replacement	85.05	96.65	100.00
Net cash returns	.89	-30.61	-38.43

Table 39B--U.S. feeder pig production economic costs and returns, 300-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	85.94	66.04	61.57
Economic (full ownership) costs:			
Variable cash expenses	55.58	66.27	69.69
General farm overhead	6.88	7.26	7.09
Taxes and insurance	2.64	2.56	2.66
Capital replacement	13.93	13.96	14.57
Operating capital 3/	.84	1.15	1.40
Other nonland capital 4/	3.39	3.86	4.43
Land 5/	1.17	1.50	1.80
Unpaid labor (5.74 hrs)	24.61	26.05	28.41
Total, economic costs	109.04	122.61	130.05
Residual returns to management and risk	-23.10	-56.57	-68.48

See footnotes at end of Table 55B.

Table 40A--U.S. feeder pig production cash costs and returns, 650-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (19.5 lbs) 1/	8.31	6.28	6.82
Feeder pigs (80.5 lbs)	78.39	60.29	55.13
Total	86.70	66.57	61.95
Cash expenses:			
Feed--			
Grain (438.7 lbs)	12.16	17.68	18.96
Protein supplements (122.8 lbs)	18.00	22.74	22.78
Pasture (0.04 ac)	.13	.18	.15
Other--			
Veterinary and medicine	.43	.44	.47
Livestock hauling	.24	.25	.26
Marketing	3.07	3.28	3.45
Bedding (42 lbs)	.47	.49	.52
Fuel, lube, and electricity	5.47	5.51	6.31
Machinery and building repairs	4.92	5.11	5.31
Hired labor (0.2 hr)	.88	.93	1.02
Manure credit	-.16	-.17	-.18
Total, variable cash expenses	45.61	56.44	59.05
General farm overhead	6.94	7.32	7.14
Taxes and insurance	1.80	1.75	1.79
Interest	6.07	6.66	6.03
Total, fixed cash expenses	14.81	15.73	14.96
Total, cash expenses	60.42	72.17	74.01
Cash receipts less cash expenses	26.28	-5.60	-12.06
Capital replacement 2/	11.21	11.11	11.54
Total, cash expenses and replacement	71.63	83.28	85.55
Net cash returns	15.07	-16.71	-23.60

Table 40B--U.S. feeder pig production economic costs and returns, 650-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	86.7	66.57	61.95
Economic (full ownership) costs:			
Variable cash expenses	45.61	56.44	59.05
General farm overhead	6.94	7.32	7.14
Taxes and insurance	1.80	1.75	1.79
Capital replacement	11.21	11.11	11.54
Operating capital 3/	.69	.98	1.19
Other nonland capital 4/	2.68	3.01	3.43
Land 5/	.32	.41	.50
Unpaid labor (4.44 hrs)	19.44	20.52	22.33
Total, economic costs	88.69	101.54	106.97
Residual returns to management and risk	-1.99	-34.97	-45.02

See footnotes at end of Table 55B.

Table 41A--U.S. feeder pig production cash costs and returns, 1,600-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (19.5 lbs) 1/	8.30	6.28	6.81
Feeder pigs (80.5 lbs)	78.49	60.36	55.21
Total	86.79	66.64	62.02
Cash expenses:			
Feed--			
Grain (433.9 lbs)	12.06	17.55	18.81
Protein supplements (121.3 lbs)	17.45	22.14	22.17
Pasture (0.01 ac)	.05	.07	.06
Other--			
Veterinary and medicine	.73	.75	.80
Livestock hauling	.20	.20	.21
Marketing	1.34	1.44	1.52
Bedding (16 lbs)	.19	.19	.20
Fuel, lube, and electricity	6.93	7.02	8.07
Machinery and building repairs	5.33	5.52	5.71
Hired labor (0.19 hr)	1.03	1.08	1.18
Manure credit	-.15	-.17	-.17
Total, variable cash expenses	45.16	55.79	58.56
General farm overhead	6.94	7.33	7.14
Taxes and insurance	2.15	2.11	2.13
Interest	6.08	6.66	6.03
Total, fixed cash expenses	15.17	16.10	15.30
Total, cash expenses	60.33	71.89	73.86
Cash receipts less cash expenses	26.46	-5.25	-11.84
Capital replacement 2/	13.22	13.25	13.73
Total, cash expenses and replacement	73.55	85.14	87.59
Net cash returns	13.24	-18.50	-25.57

Table 41B--U.S. feeder pig production economic costs and returns, 1,600-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	86.79	66.64	62.02
Economic (full ownership) costs:			
Variable cash expenses	45.16	55.79	58.56
General farm overhead	6.94	7.33	7.14
Taxes and insurance	2.15	2.11	2.13
Capital replacement	13.22	13.25	13.73
Operating capital 3/	.68	.96	1.18
Other nonland capital 4/	3.13	3.55	4.04
Land 5/	.11	.14	.17
Unpaid labor (3.06 hrs)	18.41	19.40	21.07
Total, economic costs	89.80	102.53	108.02
Residual returns to management and risk	-3.01	-35.89	-46.00

See footnotes at end of Table 55B.

Table 42A--U.S. feeder pig production cash costs and returns, 3,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (18.1 lbs) 1/	7.73	5.83	6.32
Feeder pigs (81.9 lbs)	79.75	61.37	56.14
Total	87.48	67.20	62.46
Cash expenses:			
Feed--			
Grain (409.5 lbs)	11.58	16.86	18.09
Protein supplements (114.4 lbs)	15.94	20.17	20.23
Pasture (0.01 ac)	.04	.06	.05
Other--			
Veterinary and medicine	1.00	1.02	1.10
Livestock hauling	.11	.11	.12
Marketing	1.25	1.34	1.41
Bedding (36 lbs)	.43	.44	.47
Fuel, lube, and electricity	5.10	5.18	5.89
Machinery and building repairs	4.09	4.22	4.37
Hired labor (0.57 hr)	4.52	4.75	5.13
Manure credit	-.14	-.15	-.15
Total, variable cash expenses	43.92	54.00	56.71
General farm overhead	7.00	7.39	7.19
Taxes and insurance	1.58	1.54	1.57
Interest	6.12	6.72	6.08
Total, fixed cash expenses	14.70	15.65	14.84
Total, cash expenses	58.62	69.65	71.55
Cash receipts less cash expenses	28.86	-2.45	-9.09
Capital replacement 2/	10.66	10.45	10.86
Total, cash expenses and replacement	69.28	80.10	82.41
Net cash returns	18.20	-12.90	-19.95

Table 42B--U.S. feeder pig production economic costs and returns, 3,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	87.48	67.2	62.46
Economic (full ownership) costs:			
Variable cash expenses	43.92	54.00	56.71
General farm overhead	7.00	7.39	7.19
Taxes and insurance	1.58	1.54	1.57
Capital replacement	10.66	10.45	10.86
Operating capital 3/	.66	.93	1.14
Other nonland capital 4/	2.45	2.74	3.13
Land 5/	.07	.09	.11
Unpaid labor (1.69 hrs)	12.96	13.58	14.66
Total, economic costs	79.30	90.72	95.37
Residual returns to management and risk	8.18	-23.52	-32.91

See footnotes at end of Table 55B.

Table 43A--U.S. feeder pig production cash costs and returns, 10,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (16.3 lbs) 1/	6.90	5.22	5.65
Feeder pigs (83.7 lbs)	81.61	62.75	57.41
Total	88.51	67.97	63.06
Cash expenses:			
Feed--			
Grain (367.1 lbs)	10.59	15.42	16.56
Protein supplements (102.5 lbs)	12.57	15.86	15.91
Other--			
Veterinary and medicine	2.11	2.17	2.33
Livestock hauling	.13	.13	.14
Marketing	.50	.54	.59
Custom feed mixing	2.57	2.67	2.89
Fuel, lube, and electricity	4.74	4.82	5.33
Machinery and building repairs	2.50	2.54	2.62
Hired labor (1.47 hrs)	12.17	12.67	13.60
Manure credit	-.12	-.13	-.13
Total, variable cash expenses	47.76	56.69	59.84
General farm overhead	7.08	7.48	7.26
Taxes and insurance	1.12	1.08	1.11
Interest	6.20	6.80	6.14
Total, fixed cash expenses	14.40	15.36	14.51
Total, cash expenses	62.16	72.05	74.35
Cash receipts less cash expenses	26.35	-4.08	-11.29
Capital replacement 2/	8.12	7.74	8.05
Total, cash expenses and replacement	70.28	79.79	82.40
Net cash returns	18.23	-11.82	-19.34

Table 43B--U.S. feeder pig production economic costs and returns, 10,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	88.51	67.97	63.06
Economic (full ownership) costs:			
Variable cash expenses	47.76	56.69	59.84
General farm overhead	7.08	7.48	7.26
Taxes and insurance	1.12	1.08	1.11
Capital replacement	8.12	7.74	8.05
Operating capital 3/	.72	.98	1.20
Other nonland capital 4/	1.92	2.11	2.40
Land 5/	.01	.01	.01
Unpaid labor (0.11 hr)	.86	.88	.95
Total, economic costs	67.59	76.97	80.82
Residual returns to management and risk	20.92	-9.00	-17.76

See footnotes at end of Table 55B.

Table 44A--Feeder pig production cash costs and returns, all sizes of operation, North-Central, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (20.5 lbs) 1/	8.68	6.56	7.15
Feeder pigs (79.5 lbs)	77.35	59.52	54.43
Total	86.03	66.08	61.58
Cash expenses:			
Feed--			
Grain (440.3 lbs)	11.98	17.36	18.63
Protein supplements (120.7 lbs)	16.75	21.10	21.15
Pasture (0.04 ac)	.05	.07	.06
Other--			
Veterinary and medicine	1.58	1.55	1.70
Livestock hauling	.24	.24	.26
Marketing	1.59	1.68	1.79
Bedding (38 lbs)	.42	.42	.47
Custom feed mixing	1.03	1.01	1.07
Fuel, lube, and electricity	6.57	6.54	7.69
Machinery and building repairs	4.68	4.80	4.98
Hired labor (0.29 hr)	2.19	2.45	2.61
Manure credit	-.16	-.18	-.19
Total, variable cash expenses	46.92	57.04	60.22
General farm overhead	6.88	7.27	7.09
Taxes and insurance	1.91	1.84	1.90
Interest	6.02	6.61	5.99
Total, fixed cash expenses	14.81	15.72	14.98
Total, cash expenses	61.73	72.76	75.20
Cash receipts less cash expenses	24.30	-6.68	-13.62
Capital replacement 2/	11.70	11.53	12.01
Total, cash expenses and replacement	73.43	84.29	87.21
Net cash returns	12.60	-18.21	-25.63

Table 44B--Feeder pig production economic costs and returns, all sizes of operation, North-Central, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	86.03	66.08	61.58
Economic (full ownership) costs:			
Variable cash expenses	46.92	57.04	60.22
General farm overhead	6.88	7.27	7.09
Taxes and insurance	1.91	1.84	1.90
Capital replacement	11.70	11.53	12.01
Operating capital 3/	.71	.99	1.21
Other nonland capital 4/	2.77	3.10	3.55
Land 5/	.30	.36	.47
Unpaid labor (3.39 hrs)	17.12	17.84	19.59
Total, economic costs	88.31	99.97	106.04
Residual returns to management and risk	-2.28	-33.89	-44.46

See footnotes at end of Table 55B.

Table 45A--Feeder pig production cash costs and returns, all sizes of operation, Southeast, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Cull sows (13.3 lbs) 1/	5.42	4.11	4.49
Feeder pigs (86.7 lbs)	84.70	65.11	59.46
Total	90.12	69.22	63.95
Cash expenses:			
Feed--			
Grain (379.7 lbs)	12.26	17.87	19.19
Protein supplements (103.6 lbs)	14.83	18.73	18.79
Pasture (0.03 ac)	.46	.56	.45
Other--			
Veterinary and medicine	1.24	1.27	1.34
Livestock hauling	.02	.02	.02
Marketing	1.97	2.09	2.24
Bedding (14 lbs)	.15	.16	.17
Custom feed mixing	1.85	1.89	1.85
Fuel, lube, and electricity	5.42	5.49	6.05
Machinery and building repairs	4.91	5.05	5.33
Hired labor (0.99 hr)	7.07	7.14	7.23
Total, variable cash expenses	50.18	60.27	62.66
General farm overhead	7.21	7.61	7.37
Taxes and insurance	1.75	1.71	1.77
Interest	6.31	6.92	6.22
Total, fixed cash expenses	15.27	16.24	15.36
Total, cash expenses	65.45	76.51	78.02
Cash receipts less cash expenses	24.67	-7.29	-14.07
Capital replacement 2/	11.60	11.38	11.97
Total, cash expenses and replacement	77.05	87.89	89.99
Net cash returns	13.07	-18.67	-26.04

Table 45B--Feeder pig production economic costs and returns, all sizes of operation, Southeast, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	90.12	69.22	63.95
Economic (full ownership) costs:			
Variable cash expenses	50.18	60.27	62.66
General farm overhead	7.21	7.61	7.37
Taxes and insurance	1.75	1.71	1.77
Capital replacement	11.60	11.38	11.97
Operating capital 3/	.76	1.04	1.26
Other nonland capital 4/	2.74	3.08	3.55
Land 5/	.41	.48	.56
Unpaid labor (3.63 hrs)	17.66	17.46	18.38
Total, economic costs	92.31	103.03	107.52
Residual returns to management and risk	-2.19	-33.81	-43.57

See footnotes at end of Table 55B.

Table 46A--U.S. feeder pig finishing production cash costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Slaughter hogs (100 lbs) 1/	50.98	42.84	43.50
Total	50.98	42.84	43.50
Cash expenses:			
Feeders--			
Pigs (22.7 lbs)	20.44	15.72	14.39
Feed--			
Grain (239 lbs)	6.67	9.72	10.44
Protein supplements (45.5 lbs)	5.87	7.34	7.34
Pasture (0.01 ac)	.01	.01	.01
Other--			
Veterinary and medicine	.48	.49	.52
Livestock hauling	.16	.16	.17
Marketing	.43	.45	.47
Bedding (8 lbs)	.10	.10	.10
Custom feed mixing	.07	.07	.07
Fuel, lube, and electricity	.98	.97	1.20
Machinery and building repairs	1.60	1.66	1.73
Hired labor (0.07 hr)	.43	.46	.50
Manure credit	-.13	-.15	-.15
Total, variable cash expenses	37.11	37.00	36.79
General farm overhead	4.08	4.71	5.01
Taxes and insurance	.47	.48	.47
Interest	3.57	4.28	4.23
Total, fixed cash expenses	8.12	9.47	9.71
Total, cash expenses	45.23	46.47	46.50
Cash receipts less cash expenses	5.75	-3.63	-3.00
Capital replacement 2/	2.99	3.10	3.20
Total, cash expenses and replacement	48.22	49.57	49.70
Net cash returns	2.76	-6.73	-6.20

Table 46B--U.S. feeder pig finishing production economic costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	50.98	42.84	43.5
Economic (full ownership) costs:			
Variable cash expenses	37.11	37.00	36.79
General farm overhead	4.08	4.71	5.01
Taxes and insurance	.47	.48	.47
Capital replacement	2.99	3.10	3.20
Operating capital 3/	.37	.43	.49
Other nonland capital 4/	.65	.78	.88
Land 5/	.02	.02	.03
Unpaid labor (0.29 hr)	1.39	1.42	1.54
Total, economic costs	47.08	47.94	48.41
Residual returns to management and risk	3.90	-5.10	-4.91

See footnotes at end of Table 55B.

Table 47A--U.S. feeder pig finishing production cash costs and returns, 140-head operation, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Cash receipts:			
Slaughter hogs (100 lbs) 1/	48.32	40.67	41.38
Total	48.32	40.67	41.38
Cash expenses:			
Feeders--			
Pigs (23.4 lbs)	21.28	16.43	15.08
Feed--			
Grain (241.2 lbs)	6.84	10.04	10.85
Protein supplements (44.6 lbs)	6.15	7.67	7.66
Pasture (0.01 ac)	.10	.14	.13
Other--			
Veterinary and medicine	.77	.78	.83
Livestock hauling	.08	.08	.08
Marketing	.72	.77	.81
Bedding (16 lbs)	.19	.20	.21
Custom feed mixing	.80	.99	1.23
Fuel, lube, and electricity	1.25	1.26	1.51
Machinery and building repairs	1.89	1.95	2.02
Hired labor (0.03 hr)	.17	.17	.18
Manure credit	-.11	-.11	-.11
Total, variable cash expenses	40.13	40.37	40.48
General farm overhead	3.87	4.47	4.77
Taxes and insurance	.55	.56	.57
Interest	3.38	4.07	4.03
Total, fixed cash expenses	7.80	9.10	9.37
Total, cash expenses	47.93	49.47	49.85
Cash receipts less cash expenses	.39	-8.80	-8.47
Capital replacement 2/	3.81	3.94	4.09
Total, cash expenses and replacement	51.74	53.41	53.94
Net cash returns	-3.42	-12.74	-12.56

Table 47B--U.S. feeder pig finishing production economic costs and returns, 140-head operation, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Total, cash receipts	48.32	40.67	41.38
Economic (full ownership) costs:			
Variable cash expenses	40.13	40.37	40.48
General farm overhead	3.87	4.47	4.77
Taxes and insurance	.55	.56	.57
Capital replacement	3.81	3.94	4.09
Operating capital 3/	.40	.47	.54
Other nonland capital 4/	.86	1.03	1.16
Land 5/	.11	.15	.20
Unpaid labor (0.78 hr)	3.16	3.35	3.65
Total, economic costs	52.89	54.34	55.46
Residual returns to management and risk	-4.57	-13.67	-14.08

See footnotes at end of Table 55B.

Table 48A--U.S. feeder pig finishing production cash costs and returns, 300-head operation, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Cash receipts:			
Slaughter hogs (100 lbs) 1/	50.66	42.53	43.16
Total	50.66	42.53	43.16
Cash expenses:			
Feeders--			
Pigs (22.7 lbs)	20.65	15.91	14.58
Feed--			
Grain (241.7 lbs)	6.68	9.75	10.50
Protein supplements (44.6 lbs)	6.15	7.68	7.66
Pasture (0.01 ac)	.02	.04	.03
Other--			
Veterinary and medicine	.51	.53	.57
Livestock hauling	.25	.26	.27
Marketing	.49	.52	.54
Bedding (8 lbs)	.09	.09	.10
Fuel, lube, and electricity	1.08	1.06	1.41
Machinery and building repairs	1.72	1.80	1.86
Hired labor (0.11 hr)	.50	.53	.58
Manure credit	-.12	-.13	-.14
Total, variable cash expenses	38.02	38.04	37.96
General farm overhead	4.05	4.68	4.97
Taxes and insurance	.50	.51	.50
Interest	3.55	4.25	4.20
Total, fixed cash expenses	8.10	9.44	9.67
Total, cash expenses	46.12	47.48	47.63
Cash receipts less cash expenses	4.54	-4.95	-4.47
Capital replacement 2/	3.02	3.16	3.29
Total, cash expenses and replacement	49.14	50.64	50.92
Net cash returns	1.52	-8.11	-7.76

Table 48B--U.S. feeder pig finishing production economic costs and returns, 300-head operation, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Total, cash receipts	50.66	42.53	43.16
Economic (full ownership) costs:			
Variable cash expenses	38.02	38.04	37.96
General farm overhead	4.05	4.68	4.97
Taxes and insurance	.50	.51	.50
Capital replacement	3.02	3.16	3.29
Operating capital 3/	.38	.44	.51
Other nonland capital 4/	.65	.78	.89
Land 5/	.04	.05	.07
Unpaid labor (0.43 hr)	1.84	1.95	2.12
Total, economic costs	48.50	49.61	50.31
Residual returns to management and risk	2.16	-7.08	-7.15

See footnotes at end of Table 55B.

Table 49A--U.S. feeder pig finishing production cash costs and returns, 650-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Slaughter hogs (100 lbs) 1/	51.32	43.08	43.71
Total	51.32	43.08	43.71
Cash expenses:			
Feeders--			
Pigs (22.4 lbs)	20.13	15.49	14.17
Feed--			
Grain (241.9 lbs)	6.68	9.72	10.44
Protein supplements (44.7 lbs)	6.08	7.58	7.57
Other--			
Veterinary and medicine	.45	.46	.50
Livestock hauling	.09	.09	.10
Marketing	.43	.46	.48
Bedding (14 lbs)	.16	.16	.17
Fuel, lube, and electricity	1.08	1.08	1.39
Machinery and building repairs	1.46	1.54	1.61
Hired labor (0.07 hr)	.33	.35	.38
Manure credit	-.12	-.14	-.14
Total, variable cash expenses	36.77	36.79	36.67
General farm overhead	4.11	4.74	5.04
Taxes and insurance	.41	.41	.41
Interest	3.59	4.31	4.25
Total, fixed cash expenses	8.11	9.46	9.70
Total, cash expenses	44.88	46.25	46.37
Cash receipts less cash expenses	6.44	-3.17	-2.66
Capital replacement 2/	2.49	2.62	2.73
Total, cash expenses and replacement	47.37	48.87	49.10
Net cash returns	3.95	-5.79	-5.39

Table 49B--U.S. feeder pig finishing production economic costs and returns, 650-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	51.32	43.08	43.71
Economic (full ownership) costs:			
Variable cash expenses	36.77	36.79	36.67
General farm overhead	4.11	4.74	5.04
Taxes and insurance	.41	.41	.41
Capital replacement	2.49	2.62	2.73
Operating capital 3/	.37	.42	.49
Other nonland capital 4/	.53	.64	.73
Land 5/	.01	.01	.01
Unpaid labor (0.37 hr)	1.51	1.59	1.74
Total, economic costs	46.20	47.22	47.82
Residual returns to management and risk	5.12	-4.14	-4.11

See footnotes at end of Table 55B.

Table 50A--U.S. feeder pig finishing production cash costs and returns, 1,600-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Slaughter hogs (100 lbs) 1/	51.34	43.10	43.73
Total	51.34	43.10	43.73
Cash expenses:			
Feeders--			
Pigs (22.5 lbs)	20.18	15.52	14.20
Feed--			
Grain (240.8 lbs)	6.67	9.70	10.41
Protein supplements (44.9 lbs)	6.02	7.54	7.54
Other--			
Veterinary and medicine	.47	.48	.52
Livestock hauling	.19	.19	.21
Marketing	.42	.45	.47
Bedding (6 lbs)	.08	.09	.09
Fuel, lube, and electricity	1.02	1.02	1.22
Machinery and building repairs	1.68	1.74	1.81
Hired labor (0.08 hr)	.51	.54	.58
Manure credit	-.12	-.13	-.14
Total, variable cash expenses	37.12	37.14	36.91
General farm overhead	4.11	4.74	5.04
Taxes and insurance	.52	.53	.53
Interest	3.59	4.31	4.26
Total, fixed cash expenses	8.22	9.58	9.83
Total, cash expenses	45.34	46.72	46.74
Cash receipts less cash expenses	6.00	-3.62	-3.01
Capital replacement 2/	3.47	3.58	3.70
Total, cash expenses and replacement	48.81	50.30	50.44
Net cash returns	2.53	-7.20	-6.71

Table 50B--U.S. feeder pig finishing production economic costs and returns, 1,600-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	51.34	43.10	43.73
Economic (full ownership) costs:			
Variable cash expenses	37.12	37.14	36.91
General farm overhead	4.11	4.74	5.04
Taxes and insurance	.52	.53	.53
Capital replacement	3.47	3.58	3.70
Operating capital 3/	.37	.43	.49
Other nonland capital 4/	.74	.88	1.00
Land 5/	.01	.01	.01
Unpaid labor (0.19 hr)	1.04	1.10	1.20
Total, economic costs	47.38	48.41	48.88
Residual returns to management and risk	3.96	-5.31	-5.15

See footnotes at end of Table 55B.

Table 51A--U.S. feeder pig finishing production cash costs and returns, 3,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Slaughter hogs (100 lbs) 1/	51.33	43.09	43.72
Total	51.33	43.09	43.72
Cash expenses:			
Feeders--			
Pigs (22.8 lbs)	20.41	15.71	14.38
Feed--			
Grain (235.8 lbs)	6.62	9.64	10.36
Protein supplements (47.6 lbs)	5.57	7.10	7.11
Other--			
Veterinary and medicine	.34	.35	.37
Livestock hauling	.18	.18	.19
Marketing	.41	.44	.46
Bedding (4 lbs)	.06	.06	.06
Fuel, lube, and electricity	.81	.82	.98
Machinery and building repairs	1.54	1.62	1.69
Hired labor (0.04 hr)	.35	.37	.40
Manure credit	-.11	-.12	-.13
Total, variable cash expenses	36.18	36.17	35.87
General farm overhead	4.11	4.74	5.04
Taxes and insurance	.45	.46	.46
Interest	3.59	4.31	4.25
Total, fixed cash expenses	8.15	9.51	9.75
Total, cash expenses	44.33	45.68	45.62
Cash receipts less cash expenses	7.00	-2.59	-1.90
Capital replacement 2/	2.80	2.90	3.02
Total, cash expenses and replacement	47.13	48.58	48.64
Net cash returns	4.20	-5.49	-4.92

Table 51B--U.S. feeder pig finishing production economic costs and returns, 3,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	51.33	43.09	43.72
Economic (full ownership) costs:			
Variable cash expenses	36.18	36.17	35.87
General farm overhead	4.11	4.74	5.04
Taxes and insurance	.45	.46	.46
Capital replacement	2.80	2.90	3.02
Operating capital 3/	.36	.42	.48
Other nonland capital 4/	.63	.75	.85
Land 5/	0	0	0
Unpaid labor (0.14 hr)	1.07	1.12	1.21
Total, economic costs	45.60	46.56	46.93
Residual returns to management and risk	5.73	-3.47	-3.21

See footnotes at end of Table 55B.

Table 52A--U.S. feeder pig finishing production cash costs and returns, 10,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Slaughter hogs (100 lbs) 1/	51.31	43.07	43.70
Total	51.31	43.07	43.70
Cash expenses:			
Feeders--			
Pigs (23.1 lbs)	20.74	15.94	14.60
Feed--			
Grain (232.1 lbs)	6.63	9.66	10.38
Protein supplements (45.9 lbs)	5.16	6.47	6.50
Other--			
Veterinary and medicine	.51	.52	.56
Livestock hauling	.14	.15	.16
Marketing	.23	.24	.26
Bedding (2 lbs)	.03	.03	.03
Fuel, lube, and electricity	.67	.67	.81
Machinery and building repairs	1.44	1.49	1.56
Hired labor (0.08 hr)	.64	.66	.72
Manure credit	-.21	-.23	-.24
Total, variable cash expenses	35.98	35.60	35.34
General farm overhead	4.10	4.74	5.03
Taxes and insurance	.42	.43	.43
Interest	3.59	4.31	4.25
Total, fixed cash expenses	8.11	9.48	9.71
Total, cash expenses	44.09	45.08	45.05
Cash receipts less cash expenses	7.22	-2.01	-1.35
Capital replacement 2/	2.66	2.74	2.84
Total, cash expenses and replacement	46.75	47.82	47.89
Net cash returns	4.56	-4.75	-4.19

Table 52B--U.S. feeder pig finishing production economic costs and returns, 10,000-head operation, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	51.31	43.07	43.7
Economic (full ownership) costs:			
Variable cash expenses	35.98	35.60	35.34
General farm overhead	4.10	4.74	5.03
Taxes and insurance	.42	.43	.43
Capital replacement	2.66	2.74	2.84
Operating capital 3/	.36	.41	.47
Other nonland capital 4/	.58	.69	.79
Land 5/	0	0	0
Unpaid labor (0.09 hr)	.67	.70	.76
Total, economic costs	44.77	45.31	45.66
Residual returns to management and risk	6.54	-2.24	-1.96

See footnotes at end of Table 55B.

Table 53A--Feeder pig finishing production cash costs and returns, all sizes of operation, North-Central, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Cash receipts:			
Slaughter hogs (100 lbs) 1/	50.98	42.84	43.50
Total	50.98	42.84	43.50
Cash expenses:			
Feeders--			
Pigs (22.1 lbs)	19.99	15.34	14.02
Feed--			
Grain (239.5 lbs)	6.50	9.45	10.13
Protein supplements (45.4 lbs)	5.87	7.34	7.33
Other--			
Veterinary and medicine	.49	.50	.53
Livestock hauling	.17	.17	.19
Marketing	.44	.46	.48
Bedding (10 lbs)	.11	.11	.12
Fuel, lube, and electricity	.97	.95	1.21
Machinery and building repairs	1.59	1.65	1.72
Hired labor (0.07 hr)	.41	.43	.48
Manure credit	-.15	-.17	-.18
Total, variable cash expenses	36.39	36.23	36.03
General farm overhead	4.08	4.71	5.01
Taxes and insurance	.46	.47	.46
Interest	3.57	4.28	4.23
Total, fixed cash expenses	8.11	9.46	9.70
Total, cash expenses	44.50	45.69	45.73
Cash receipts less cash expenses	6.48	-2.85	-2.23
Capital replacement 2/	2.96	3.06	3.16
Total, cash expenses and replacement	47.46	48.75	48.89
Net cash returns	3.52	-5.91	-5.39

Table 53B--Feeder pig finishing production economic costs and returns, all sizes of operation, North-Central, 1987-89

Item	1987	1988	1989
		Dollars per cwt	
Total, cash receipts	50.98	42.84	43.5
Economic (full ownership) costs:			
Variable cash expenses	36.39	36.23	36.03
General farm overhead	4.08	4.71	5.01
Taxes and insurance	.46	.47	.46
Capital replacement	2.96	3.06	3.16
Operating capital 3/	.37	.42	.48
Other nonland capital 4/	.65	.77	.87
Land 5/	.01	.01	.01
Unpaid labor (0.29 hr)	1.37	1.41	1.54
Total, economic costs	46.29	47.08	47.56
Residual returns to management and risk	4.69	-4.24	-4.06

See footnotes at end of Table 55B.

Table 54A--Feeder pig finishing production cash costs and returns, all sizes of operation, Southeast, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Cash receipts:			
Slaughter hogs (100 lbs) 1/	51.01	42.82	43.45
Total	51.01	42.82	43.45
Cash expenses:			
Feeders--			
Pigs (25.7 lbs)	23.10	17.76	16.23
Feed--			
Grain.(237 lbs)	7.66	11.17	11.98
Protein supplements (45.5 lbs)	5.86	7.33	7.37
Pasture (0.01 ac)	.08	.09	.08
Other--			
Veterinary and medicine	.42	.43	.46
Livestock hauling	.09	.09	.10
Marketing	.38	.41	.43
Bedding (2 lbs)	.02	.02	.02
Custom feed mixing	.45	.46	.44
Fuel, lube, and electricity	1.04	1.04	1.13
Machinery and building repairs	1.63	1.71	1.77
Hired labor (0.09 hr)	.58	.58	.60
Total, variable cash expenses	41.31	41.09	40.61
General farm overhead	4.08	4.71	5.01
Taxes and insurance	.52	.53	.52
Interest	3.57	4.28	4.23
Total, fixed cash expenses	8.17	9.52	9.76
Total, cash expenses	49.48	50.61	50.37
Cash receipts less cash expenses	1.53	-7.79	-6.92
Capital replacement 2/	3.17	3.29	3.39
Total, cash expenses and replacement	52.65	53.90	53.76
Net cash returns	-1.64	-11.08	-10.31

Table 54B--Feeder pig finishing production economic costs and returns, all sizes of operation, Southeast, 1987-89

Item	1987	1988	1989
	Dollars per cwt		
Total, cash receipts	51.01	42.82	43.45
Economic (full ownership) costs:			
Variable cash expenses	41.31	41.09	40.61
General farm overhead	4.08	4.71	5.01
Taxes and insurance	.52	.53	.52
Capital replacement	3.17	3.29	3.39
Operating capital 3/	.42	.47	.54
Other nonland capital 4/	.66	.79	.89
Land 5/	.07	.09	.10
Unpaid labor (0.32 hr)	1.49	1.47	1.52
Total, economic costs	51.72	52.44	52.58
Residual returns to management and risk	-.71	-9.62	-9.13

See footnotes at end of Table 55B.

Table 55A--U.S. sheep production cash costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
	Dollars per ewe		
Cash receipts:			
Slaughter lambs (31.8 lbs) 1/	22.64	20.36	19.51
Feeder lambs (26.7 lbs)	23.19	21.06	19.54
Cull ewes (29.3 lbs)	6.69	6.76	6.74
Wool (10 lbs)	10.05	15.17	13.43
Wool incentive payment	9.77	4.41	6.07
Unshorn lamb payment	1.94	.87	1.21
Total	74.28	68.63	66.50
Cash expenses:			
Feed--			
Grain (0.75 bu)	1.39	2.00	2.16
Protein supplements (0.38 cwt)	3.80	4.30	4.54
Salt and minerals (0.07 cwt)	.40	.40	.42
Hay (0.10 ton)	2.85	3.89	3.48
Pasture	2.89	3.12	3.36
Public grazing	.67	.77	.93
Crop residue	.05	.05	.06
Other--			
Veterinary and medicine	1.10	1.13	1.22
Livestock hauling	1.23	1.27	1.36
Marketing	.30	.32	.34
Ram death loss	.33	.30	.28
Shearing and tagging	1.20	1.26	1.30
Fuel, lube, and electricity	1.17	1.19	1.38
Machinery and building repairs	2.35	2.44	2.54
Hired labor (1.41 hrs)	6.53	6.76	6.99
Miscellaneous	1.17	1.25	1.32
Total, variable cash expenses	27.43	30.45	31.68
General farm overhead	4.46	3.43	3.48
Taxes and insurance	2.75	2.82	2.87
Interest	6.69	6.18	5.82
Total, fixed cash expenses	13.90	12.43	12.17
Total, cash expenses	41.33	42.88	43.85
Value of production less cash expenses	32.95	25.75	22.65
Capital replacement 2/	7.83	7.96	8.14
Total, cash expenses and replacement	49.16	50.84	51.99
Net cash returns	25.12	17.79	14.51

See footnotes at end of Table 55B.

Table 55B--U.S. sheep production economic costs and returns, all sizes of operation, 1987-89

Item	1987	1988	1989
	Dollars per ewe		
Total, cash receipts	74.28	68.63	66.50
Economic (full ownership) costs:			
Variable cash expenses	27.43	30.45	31.68
General farm overhead	4.46	3.43	3.48
Taxes and insurance	2.75	2.82	2.87
Capital replacement	7.83	7.96	8.14
Operating capital 3/	.83	1.05	1.27
Other nonland capital 4/	3.24	3.77	4.16
Land 5/	5.81	6.61	7.13
Unpaid labor (2.09 hrs)	7.48	7.93	8.20
Total, economic costs	59.83	64.02	66.93
Residual returns to management and risk	14.45	4.61	-.43

1/ Quantities per unit in parentheses are for the latest year and will vary for earlier years. 2/ Capital replacement cost is treated as a cash cost. 3/ Variable expense items multiplied by part of year used and 6-month U.S. Treasury bill rate. 4/ Value of machinery and equipment multiplied by longrun real rate of return to production assets in farm sector. 5/ Value of land multiplied by longrun real rate of return to production assets in farm sector.

Table 56A--U.S. milk production cash costs and returns, all sizes of operation, per cwt, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
				Dollars				
Cash receipts:								
Milk	6.07	7.13	8.33	8.58	9.57	9.62	10.49	11.93
Cull cows	.79	1.03	.79	.65	.75	.74	1.06	1.49
Total	6.86	8.16	9.12	9.23	10.32	10.36	11.55	13.42
Cash expenses:								
Feed--								
Concentrates	1.51	2.17	2.72	2.71	2.71	2.66	2.68	3.02
By-products								
Hay	.44	.57	.70	.73	.79	.69	.64	.74
Silage	.31	.40	.49	.51	.56	.48	.44	.52
Pasture and other forage	.02	.03	.04	.04	.04	.03	.03	.04
Other--								
Milk hauling and marketing	.31	.32	.33	.31	.31	.32	.33	.38
Artificial insemination	.05	.05	.06	.07	.08	.08	.08	.09
Veterinary and medicine	.12	.13	.14	.16	.17	.17	.17	.18
Livestock hauling	.01	.01	.02	.01	.01	.01	.01	.02
Fuel, lube, and electricity	.12	.13	.17	.19	.19	.20	.21	.27
Machinery and building repairs	.20	.22	.26	.30	.28	.27	.28	.30
Hired labor	.45	.50	.56	.60	.62	.65	.69	.74
DHIA fees	.02	.02	.03	.03	.03	.04	.04	.04
Dairy supplies	.09	.10	.12	.14	.14	.14	.15	.17
Dairy assessment	0	0	0	0	0	0	0	0
Total, variable cash expenses	3.65	4.65	5.64	5.80	5.93	5.74	5.75	6.51
General farm overhead	.09	.12	.16	.19	.23	.24	.29	.38
Taxes and insurance	.10	.12	.15	.14	.16	.18	.21	.29
Interest	.41	.52	.65	.68	.76	.74	.83	1.08
Total, fixed cash expenses	.60	.76	.96	1.01	1.15	1.16	1.33	1.75
Total, cash expenses	4.25	5.41	6.60	6.81	7.08	6.90	7.08	8.26
Cash receipts less cash expenses	2.61	2.75	2.52	2.42	3.24	3.46	4.47	5.16
Capital replacement	.73	.86	.98	.87	.92	.96	1.14	1.47
Total, cash expenses and replacement	3.34	3.61	3.50	3.29	4.16	4.42	5.61	6.63
Net cash returns	1.88	1.89	1.54	1.55	2.32	2.50	3.33	3.69

Continued--

Table 56B--U.S. milk production economic costs and returns, all sizes of operation, per cwt, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
				Dollars				
Total, cash receipts	6.86	8.16	9.12	9.23	10.32	10.36	11.55	13.42
Economic (full ownership) costs:								
Variable cash expenses	3.65	4.65	5.64	5.80	5.93	5.74	5.75	6.51
General farm overhead	.09	.12	.16	.19	.23	.24	.29	.38
Taxes and insurance	.10	.12	.15	.14	.16	.18	.21	.29
Capital replacement	.73	.86	.98	.87	.92	.96	1.14	1.47
Operating capital	.06	.10	.11	.08	.06	.06	.09	.12
Other nonland capital	.33	.40	.51	.48	.51	.51	.58	.75
Land	.22	.23	.25	.17	.18	.20	.21	.23
Unpaid labor	.80	.88	.99	1.06	1.10	1.15	1.22	1.32
Total, economic costs	5.98	7.36	8.79	8.79	9.09	9.04	9.49	11.07
Residual returns to management and risk	.88	.80	.33	.44	1.23	1.32	2.06	2.35
Cwt of milk per unit	115.31	113.73	115.69	116.11	123.09	126.45	126.96	129.12

Continued--

Table 56A--U.S. milk production cash costs and returns, all sizes of operation, per cwt, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
				Dollars			
Cash receipts:							
Milk	12.95	13.69	13.52	13.50	13.38	12.70	12.47
Cull cows	1.38	1.25	1.14	1.09	1.07	1.06	1.02
Total	14.33	14.94	14.66	14.59	14.45	13.76	13.49
Cash expenses:							
Feed--							
Concentrates	3.35	3.45	3.28	3.43	3.47	3.35	3.19
By-products						.21	.20
Hay	.86	.80	.86	.85	.82	1.10	1.04
Silage	.61	.56	.54	.56	.58	.58	.57
Pasture and other forage	.04	.04	.04	.04	.04	.06	.06
Other--							
Milk hauling and marketing	.43	.45	.45	.44	.45	.58	.55
Artificial insemination	.10	.11	.12	.12	.12	.12	.12
Veterinary and medicine	.19	.20	.20	.21	.22	.20	.20
Livestock hauling	.02	.02	.02	.02	.02	.03	.03
Fuel, lube, and electricity	.38	.40	.40	.37	.33	.32	.22
Machinery and building repairs	.33	.35	.37	.37	.37	.40	.39
Hired labor	.77	.83	.87	.85	.91	.92	.95
DHIA fees	.04	.05	.05	.05	.05	.06	.06
Dairy supplies	.18	.19	.19	.19	.19	.21	.19
Dairy assessment	0	0	0	.48	.50	.13	.36
Total, variable cash expenses	7.30	7.45	7.39	7.98	8.07	8.27	8.13
General farm overhead	.46	.54	.60	.50	.60	.53	.59
Taxes and insurance	.34	.37	.35	.36	.34	.37	.35
Interest	1.29	1.52	1.56	1.55	1.63	1.41	1.23
Total, fixed cash expenses	2.09	2.43	2.51	2.41	2.57	2.31	2.17
Total, cash expenses	9.39	9.88	9.90	10.39	10.64	10.58	10.30
Cash receipts less cash expenses	4.94	5.06	4.76	4.20	3.81	3.18	3.19
Capital replacement	1.61	1.64	1.57	1.58	1.56	1.70	1.64
Total, cash expenses and replacement	6.55	6.70	6.33	5.78	5.37	12.28	11.94
Net cash returns	3.33	3.42	3.19	2.62	2.25	1.48	1.55

Table 56B--U.S. milk production economic costs and returns, all sizes of operation, per cwt, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
				Dollars			
Total, cash receipts	14.33	14.94	14.66	14.59	14.45	13.76	13.49
Economic (full ownership) costs:							
Variable cash expenses	7.30	7.45	7.39	7.98	8.07	8.27	8.13
General farm overhead	.46	.54	.60	.50	.60	.53	.59
Taxes and insurance	.34	.37	.35	.36	.34	.37	.35
Capital replacement	1.61	1.64	1.57	1.58	1.56	1.70	1.64
Operating capital	.13	.15	.12	.12	.12	.08	.05
Other nonland capital	.80	.77	.71	.64	.49	.53	.52
Land	.26	.26	.25	.24	.19	.18	.14
Unpaid labor	1.37	1.46	1.51	1.49	1.58	.53	.55
Total, economic costs	12.27	12.64	12.50	12.91	12.95	12.19	11.97
Residual returns to management and risk	2.06	2.30	2.16	1.68	1.50	1.57	1.52
Cwt of milk per cow	133.44	136.19	137.62	140.95	139.55	132.40	135.01

Table 57A--U.S. fed cattle production cash costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
	Dollars per cwt							
Cash receipts:								
Fed beef	35.76	44.20	38.97	41.79	38.97	40.18	52.40	67.85
Total	35.76	44.20	38.97	41.79	38.97	40.18	52.40	67.85
Cash expenses:								
Feeders--								
Feeder cattle	22.58	28.93	20.60	18.41	21.48	21.92	27.84	44.67
Feed--								
Haylage	.03	.04	.06	.06	.07	.06	.05	.05
Silage	.62	.77	1.04	1.07	1.22	1.08	.94	.86
Dry grain & concentrates	6.82	10.90	16.65	15.41	14.33	10.99	9.36	10.61
Protein supplements	1.33	2.90	2.15	1.76	1.76	2.15	1.95	2.12
Legume hay	.39	.49	.66	.68	.78	.69	.60	.72
Other roughages	.13	.16	.21	.22	.25	.22	.20	.23
Total feed costs	9.33	15.26	20.76	19.20	18.41	15.19	13.10	14.59
Other--								
Veterinary and medicine	.29	.31	.34	.37	.39	.38	.41	.44
Livestock hauling	.10	.11	.12	.13	.13	.13	.14	.12
Marketing	.05	.06	.06	.07	.07	.07	.08	.08
Bedding	.03	.03	.04	.04	.04	.04	.04	.04
Fuel, lube, and electricity	.21	.22	.30	.33	.35	.38	.40	.49
Machinery and building repairs	.25	.26	.36	.40	.43	.46	.50	.49
Hired labor	.28	.30	.35	.37	.41	.44	.47	.52
Miscellaneous	.29	.31	.38	.45	.47	.50	.53	.60
Manure credit	-.07	-.07	-.07	-.07	-.07	-.07	-.07	-.08
Total, variable cash expenses	33.33	45.72	43.24	39.71	42.11	39.44	43.44	61.96
General farm overhead	.24	.59	.50	.45	.48	.62	.60	.76
Taxes and insurance	.12	.15	.14	.15	.14	.14	.17	.16
Hired management	.07	.09	.08	.08	.08	.08	.08	.10
Interest	2.07	2.56	2.26	2.42	2.26	2.33	3.12	4.32
Total, fixed cash expenses	2.51	3.39	2.97	3.10	2.95	3.17	3.97	5.34
Total, cash expenses	35.83	49.11	46.21	42.81	45.06	42.61	47.41	67.30
Cash receipts less cash expenses	-.07	-4.91	-7.24	-1.02	-6.09	-2.43	4.99	.55
Capital replacement	.93	.98	1.08	1.17	1.23	1.21	1.34	1.57
Total, cash expenses and replacement	36.76	50.09	47.29	43.98	46.30	43.82	48.75	68.87
Net cash returns	-1.00	-5.89	-8.31	-2.19	-7.32	-3.64	3.65	-1.02

Continued--

Table 57B--U.S. fed cattle production economic costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
	Dollars per cwt							
Total, cash receipts	35.76	44.20	38.97	41.79	38.97	40.18	52.40	67.85
Economic (full ownership) costs:								
Variable cash expenses	33.33	45.72	43.24	39.71	42.11	39.44	43.44	61.96
General farm overhead	.24	.59	.50	.45	.48	.62	.60	.76
Taxes and insurance	.12	.15	.14	.15	.14	.14	.17	.16
Capital replacement	.93	.98	1.08	1.17	1.23	1.21	1.34	1.57
Hired management	.07	.09	.08	.08	.08	.08	.08	.10
Operating capital	.31	.66	.69	.49	.45	.44	.67	1.26
Other nonland capital	.38	.40	.44	.48	.50	.49	.49	.42
Land	.03	.04	.05	.06	.07	.08	.08	.10
Unpaid labor	.63	.66	.73	.80	.84	.82	.90	.81
Total, economic costs	36.05	49.29	46.94	43.38	45.89	43.32	47.77	67.14
Residual returns to management and risk	-.29	-5.09	-7.97	-1.59	-6.92	-3.14	4.63	.71

Continued--

Table 57A--U.S. fed cattle production cash costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
				Dollars per cwt			
Cash receipts:							
Fed beef	66.20	63.41	63.62	62.12	64.95	59.49	58.42
Total	66.20	63.41	63.62	62.12	64.95	59.49	58.42
Cash expenses:							
Feeders--							
Feeder cattle	47.33	42.90	39.05	37.62	38.53	38.90	36.17
Feed--							
Haylage	.05	.06	.06	.07	.06	.05	.04
Silage	.96	1.22	.94	.85	.94	.92	.93
Dry grain & concentrates	12.13	13.51	10.98	13.60	14.00	11.54	9.53
Protein supplements	2.22	2.38	2.25	2.37	2.00	2.07	2.61
Legume hay	.79	.98	.96	1.04	1.25	1.02	.91
Other roughages	.27	.39	.41	.43	.64	.55	0
Total feed costs	16.42	18.54	15.60	18.36	18.89	16.15	14.02
Other--							
Veterinary and medicine	.47	.51	.49	.51	.51	.52	.55
Livestock hauling	.15	.17	.16	.15	.14	.15	.24
Marketing	.08	.08	.08	.07	.06	.06	.06
Bedding	.04	.06	.05	.05	.04	.05	.06
Fuel, lube, and electricity	.67	.76	.72	.67	.51	.48	.49
Machinery and building repairs	.53	.57	.56	.58	.51	.55	.56
Hired labor	.56	.60	.63	.64	.75	.76	.80
Miscellaneous	.75	.84	.93	.97	1.01	1.00	.89
Manure credit	-.10	-.11	-.11	-.10	-.08	-.08	-.07
Total, variable cash expenses	66.90	64.92	58.16	59.52	60.87	58.54	53.77
General farm overhead	.90	.93	.99	.98	1.05	.93	1.11
Taxes and insurance	.17	.17	.18	.18	.16	.16	.17
Hired management	.11	.12	.13	.14	.11	.11	.13
Interest	4.69	5.08	5.40	5.01	4.81	4.28	5.09
Total, fixed cash expenses	5.87	6.30	6.70	6.31	6.13	5.48	6.50
Total, cash expenses	72.77	71.22	64.86	65.83	67.00	64.02	60.27
Cash receipts less cash expenses	-6.57	-7.81	-1.24	-3.71	-2.05	-4.53	-1.85
Capital replacement	1.12	1.23	1.19	1.21	1.07	1.11	1.17
Total, cash expenses and replacement	73.89	72.45	66.05	67.04	68.07	65.13	61.44
Net cash returns	-7.69	-9.04	-2.43	-4.92	-3.12	-5.64	-3.02

Table 57B--U.S. fed cattle production economic costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
				Dollars per cwt			
Total, cash receipts	66.20	63.41	63.62	62.12	64.95	59.49	58.42
Economic (full ownership) costs:							
Variable cash expenses	66.90	64.92	58.16	59.52	60.87	58.54	53.77
General farm overhead	.90	.93	.99	.98	1.05	.93	1.11
Taxes and insurance	.17	.17	.18	.18	.16	.16	.17
Capital replacement	1.12	1.23	1.19	1.21	1.07	1.11	1.17
Hired management	.11	.12	.13	.14	.11	.11	.13
Operating capital	1.49	1.81	1.31	1.06	1.21	.91	.59
Other nonland capital	.41	.38	.34	.31	.23	.43	.23
Land	.11	.12	.12	.11	.08	.07	.04
Unpaid labor	.58	.60	.55	.52	.47	1.39	.55
Total, economic costs	71.79	70.28	62.96	64.02	65.26	63.65	57.76
Residual returns to management and risk	-5.59	-6.87	.66	-1.90	-.31	-4.16	.66

Table 58A--U.S. cow-calf production cash costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
				Dollars per cwt				
Cash receipts:								
Steer calves	44.78	57.51	40.97	36.68	39.52	43.46	77.16	103.94
Heifer calves	26.50	34.04	24.25	21.71	23.38	25.72	45.66	61.51
Yearling steers	29.06	37.32	26.59	23.80	34.42	28.20	48.34	83.37
Yearling heifers	18.25	23.44	16.70	14.95	21.62	17.71	30.36	52.36
Cull cows	21.80	22.11	18.24	21.89	15.79	31.82	43.03	51.12
Total	140.39	174.42	126.75	119.03	134.73	146.91	244.55	352.30
Cash expenses:								
Feed--								
Grain	3.44	5.56	8.59	7.94	7.32	5.97	6.56	7.78
Silage	1.34	2.16	3.34	3.09	2.85	2.32	2.20	2.66
Protein supplements	4.25	9.24	6.81	5.58	5.58	6.84	9.21	12.34
Salt and minerals	1.52	1.63	1.83	2.07	2.25	2.55	2.60	2.65
Hay	27.13	31.00	36.28	45.38	47.21	35.03	33.05	29.86
Pasture	24.61	28.26	29.15	29.18	29.84	29.66	30.84	34.15
Public grazing	.63	.73	.93	.93	1.37	1.37	1.12	1.08
Crop residue (purchased)	.06	.06	.06	.06	.06	.07	.07	.06
Total feed costs	62.98	78.64	86.99	94.23	96.48	83.81	85.65	90.58
Other--								
Veterinary and medicine	3.85	4.01	3.82	3.98	3.79	3.94	4.45	4.54
Livestock hauling	.95	1.04	.95	1.03	.94	1.02	1.07	1.23
Marketing	2.48	2.63	2.46	2.61	2.44	2.59	3.01	3.58
Custom feed mixing	.29	.30	.29	.30	.29	.30	.34	.38
Fuel, lube, electricity	5.52	5.83	8.08	9.00	9.52	10.23	10.73	14.02
Machinery and building repairs	9.34	9.88	12.05	13.81	12.58	13.54	14.62	16.04
Hired labor	4.99	5.46	6.26	6.73	7.62	7.92	9.00	10.46
Total, variable cash expenses	90.40	107.79	120.90	131.69	133.66	123.35	128.87	140.83
General farm overhead	4.10	5.55	4.96	5.53	6.54	7.59	13.53	22.06
Taxes and insurance	11.45	11.76	12.37	13.28	16.09	15.27	16.15	19.82
Interest	8.13	11.82	10.15	11.29	17.08	18.10	30.30	48.45
Total, fixed cash expenses	23.68	29.13	27.48	30.10	39.71	40.96	59.98	90.33
Total, cash expenses	114.08	136.92	148.38	161.79	173.37	164.31	188.85	231.16
Cash receipts less cash expenses	26.31	37.50	-21.63	-42.76	-38.64	-17.40	55.70	121.14
Capital replacement	26.65	28.16	30.64	33.49	35.21	34.59	37.39	46.74
Total, cash expenses and replacement	140.73	165.08	179.02	195.28	208.58	198.90	226.24	277.90
Net cash returns	-.34	9.34	-52.27	-76.25	-73.85	-51.99	18.31	74.40

Continued--

Table 58B--U.S. cow-calf production economic costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
				Dollars per cwt				
Total, cash receipts	140.39	174.42	126.75	119.03	134.73	146.91	244.55	352.30
Economic (full ownership) costs:								
Variable cash expenses	90.40	107.79	120.90	131.69	133.66	123.35	128.87	140.83
General farm overhead	4.10	5.55	4.96	5.53	6.54	7.59	13.53	22.06
Taxes and insurance	11.45	11.76	12.37	13.28	16.09	15.27	16.15	19.82
Capital replacement	26.65	28.16	30.64	33.49	35.21	34.59	37.39	46.74
Operating capital	2.02	3.87	4.79	4.03	3.52	3.40	4.88	7.04
Other nonland capital	28.67	30.31	33.03	36.12	37.93	36.26	35.21	34.90
Land	26.93	31.87	45.00	54.40	61.81	69.09	73.03	81.78
Unpaid labor	18.21	20.42	23.95	25.41	28.37	37.42	45.58	55.24
Total, economic costs	208.43	239.72	275.64	303.95	323.13	326.97	354.64	408.41
Residual returns to management and risk	-68.04	-65.30	-148.89	-184.92	-188.40	-180.06	-110.09	-56.11

Continued--

Table 58A--U.S. cow-calf production cash costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
	Dollars per cwt						
Cash receipts:							
Steer calves	90.02	74.86	74.22	74.62	76.37	77.71	78.17
Heifer calves	53.27	44.02	44.25	43.80	44.36	46.22	47.81
Yearling steers	78.40	67.72	64.73	61.23	65.89	61.52	66.69
Yearling heifers	49.24	44.08	42.19	38.89	41.47	40.30	43.97
Cull cows	35.98	29.96	30.10	28.64	30.69	28.64	28.83
Total	306.91	260.64	255.49	247.18	258.78	254.39	265.47
Cash expenses:							
Feed--							
Grain	10.12	9.42	8.31	10.70	11.20	9.39	7.62
Silage	4.58	5.51	4.66	6.20	5.83	6.04	5.55
Protein supplements	17.28	18.21	17.26	18.13	18.69	16.00	15.83
Salt and minerals	2.13	2.41	2.40	2.52	2.62	2.69	1.96
Hay	32.03	40.23	41.47	38.99	43.34	42.96	33.34
Pasture	35.81	37.40	39.02	36.45	39.30	36.44	34.47
Public grazing	.68	.76	.75	.65	.71	.66	.69
Crop residue (purchased)	.07	.07	.07	.08	.08	.07	.09
Total feed costs	102.70	114.01	113.94	113.72	121.77	114.25	99.55
Other--							
Veterinary and medicine	5.05	5.52	5.91	6.11	6.31	6.38	6.60
Livestock hauling	1.40	1.75	1.70	1.74	1.80	1.85	1.86
Marketing	3.81	3.86	3.90	4.00	4.10	4.21	4.16
Custom feed mixing	.42	.44	.49	.47	.48	.49	.48
Fuel, lube, electricity	19.23	21.72	21.30	19.54	16.58	16.00	11.90
Machinery and building repairs	17.60	19.31	21.17	22.09	21.58	22.51	21.71
Hired labor	11.72	13.41	13.02	13.48	13.72	13.98	14.40
Total, variable cash expenses	161.93	180.02	181.43	181.15	186.34	179.67	160.66
General farm overhead	21.94	20.68	19.47	19.26	24.13	22.43	29.20
Taxes and insurance	20.52	19.62	20.87	23.43	19.54	19.04	24.06
Interest	47.50	44.86	45.43	44.96	46.52	44.30	39.82
Total, fixed cash expenses	89.96	85.16	85.77	87.65	90.19	85.77	93.08
Total, cash expenses	251.89	265.18	267.20	268.80	276.53	265.44	253.74
Cash receipts less cash expenses	55.02	-4.54	-11.71	-21.62	-17.75	-11.05	11.73
Capital replacement	54.19	59.22	62.88	64.28	64.46	64.53	63.37
Total, cash expenses and replacemet	306.08	324.40	330.08	333.08	340.99	329.97	317.11
Net cash returns	.83	-63.76	-74.59	-85.90	-82.21	-75.58	-51.64

Table 58B--U.S. cow-calf production economic costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
	Dollars per cwt						
Total, cash receipts	306.91	260.64	255.49	247.18	258.78	254.39	265.47
Economic (full ownership) costs:							
Variable cash expenses	161.93	180.02	181.43	181.15	186.34	179.67	160.66
General farm overhead	21.94	20.68	19.47	19.26	24.13	22.43	29.20
Taxes and insurance	20.52	19.62	20.87	23.43	19.54	19.04	24.06
Capital replacement	54.19	59.22	62.88	64.28	64.46	64.53	63.37
Operating capital	9.21	12.40	10.05	7.93	9.13	6.88	4.34
Other nonland capital	34.17	32.29	31.55	29.67	23.61	22.36	23.05
Land	92.95	94.57	92.86	83.72	66.15	54.86	56.21
Unpaid labor	65.29	72.11	71.71	74.68	76.73	78.27	82.56
Total, economic costs	460.20	490.91	490.82	484.12	470.09	448.04	443.45
Residual returns to management and risk	-153.29	-230.27	-235.33	-236.94	-211.31	-193.65	-177.98

Table 59A--U.S. farrow-to-finish production cash costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
				Dollars per cwt				
Cash receipts:								
Slaughter hogs	24.16	36.48	31.81	43.77	40.16	37.20	43.81	39.99
Cull sows	1.73	2.67	2.23	3.25	2.89	2.68	3.30	2.75
Total	25.89	39.15	34.04	47.02	43.05	39.88	47.11	42.74
Cash expenses:								
Feed--								
Grain	7.42	11.99	18.53	17.13	15.87	12.88	13.28	15.01
Protein supplements	6.94	15.10	11.14	9.12	9.35	11.18	10.56	11.67
Pasture	.02	.03	.03	.03	.03	.03	.03	.03
Total feed costs	14.39	27.12	29.69	26.28	25.25	24.09	23.87	26.71
Other--								
Veterinary and medicine	.26	.27	.30	.41	.40	.40	.41	.44
Livestock hauling	.04	.04	.05	.06	.07	.07	.08	.09
Marketing	.19	.21	.23	.25	.29	.28	.33	.30
Bedding	.05	.06	.09	.09	.08	.09	.09	.11
Custom feed mixing	0	0	0	0	0	0	0	0
Fuel, lube, and electricity	.51	.54	.74	.83	.88	.94	.99	1.29
Machinery and building repairs	1.06	1.13	1.25	1.37	1.54	1.54	1.60	1.77
Hired labor	.42	.46	.53	.57	.63	.67	.72	.79
Manure credit	-.10	-.10	-.11	-.12	-.14	-.14	-.14	-.15
Total, variable cash expenses	16.83	29.73	32.78	29.73	29.00	27.94	27.95	31.35
General farm overhead	.87	.92	1.03	1.12	1.27	1.26	1.59	1.63
Taxes and insurance	.39	.40	.42	.45	.54	.52	.56	.65
Interest	1.79	2.10	2.48	2.93	4.23	3.81	4.52	4.55
Total, fixed cash expenses	3.05	3.42	3.92	4.51	6.04	5.59	6.67	6.83
Total, cash expenses	19.88	33.15	36.70	34.24	35.04	33.53	34.62	38.18
Cash receipts less cash expenses	6.00	6.00	-2.66	12.78	8.01	6.35	12.49	4.56
Capital replacement	2.66	2.99	2.29	4.20	5.10	4.67	5.12	5.98
Total, cash expenses and replacement	22.55	36.14	38.99	38.44	40.14	38.20	39.74	44.16
Net cash returns	3.34	3.01	-4.95	8.58	2.91	1.68	7.37	-1.42

Continued--

Table 59B--U.S. farrow-to-finish production economic costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
				Dollars per cwt				
Total, cash receipts	25.89	39.15	34.04	47.02	43.05	39.88	47.11	42.74
Economic (full ownership) costs:								
Variable cash expenses	16.83	29.73	32.78	29.73	29.00	27.94	27.95	31.35
General farm overhead	.87	.92	1.03	1.12	1.27	1.26	1.59	1.63
Taxes and insurance	.39	.40	.42	.45	.54	.52	.56	.65
Capital replacement	2.66	2.99	2.29	4.20	5.10	4.67	5.12	5.98
Operating capital	.19	.53	.65	.46	.38	.38	.53	.79
Other nonland capital	1.39	1.47	1.59	1.74	1.88	1.80	1.75	1.73
Land	.04	.05	.07	.09	.10	.11	.12	.13
Unpaid labor	2.21	2.42	2.77	2.98	3.25	3.50	3.74	4.09
Total, economic costs	24.58	38.51	41.59	40.77	41.52	40.19	41.36	46.35
Residual returns to management and risk	1.31	.64	-7.56	6.25	1.53	-.31	5.75	-3.61

Continued--

Table 59A--U.S. farrow-to-finish production cash costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
				Dollars per cwt			
Cash receipts:							
Slaughter hogs	37.62	41.67	51.70	44.66	45.79	42.10	48.00
Cull sows	1.98	2.20	2.77	2.26	2.35	2.12	2.46
Total	39.60	43.87	54.47	46.92	48.14	44.22	50.46
Cash expenses:							
Feed--							
Grain	16.94	18.32	14.83	18.85	19.22	15.69	12.15
Protein supplements	11.68	12.27	11.40	12.19	11.26	9.13	9.88
Pasture	.05	.05	.05	.04	.04	.03	.03
Total feed costs	28.67	30.64	26.28	31.08	30.52	24.85	22.06
Other--							
Veterinary and medicine	.47	.50	.51	.53	.54	.53	.55
Livestock hauling	.10	.12	.12	.13	.13	.13	.13
Marketing	.30	.33	.36	.33	.35	.33	.35
Bedding	.12	.18	.15	.15	.15	.15	.15
Custom feed mixing	0	0	0	0	0	0	0
Fuel, lube, and electricity	1.77	2.06	2.06	1.96	1.81	1.74	1.67
Machinery and building repairs	2.06	2.25	2.35	2.45	2.34	2.38	2.32
Hired labor	.85	.99	.98	1.08	1.23	1.34	1.19
Manure credit	-.19	-.20	-.20	-.19	-.21	-.20	-.19
Total, variable cash expenses	34.15	36.87	32.61	37.52	36.86	31.25	28.23
General farm overhead	1.72	2.12	2.66	2.47	2.37	2.14	3.53
Taxes and insurance	.61	.67	.69	.78	.70	.83	.73
Interest	4.75	5.85	8.28	5.65	7.00	5.41	6.05
Total, fixed cash expenses	7.08	8.64	11.63	8.90	10.07	8.38	10.31
Total, cash expenses	41.23	45.51	44.24	46.42	46.93	39.63	38.54
Cash receipts less cash expenses	-1.63	-1.64	10.23	.50	1.21	4.59	11.92
Capital replacement	5.15	5.59	5.81	6.19	5.68	5.65	5.58
Total, cash expenses and replacement	46.38	51.10	50.05	52.61	52.61	45.28	44.12
Net cash returns	-6.78	-7.23	4.42	-5.69	-4.47	-1.06	6.34

Table 59B--U.S. farrow-to-finish production economic costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
				Dollars per cwt			
Total, cash receipts	39.60	43.87	54.47	46.92	48.14	44.22	50.46
Economic (full ownership) costs:							
Variable cash expenses	34.15	36.87	32.61	37.52	36.86	31.25	28.23
General farm overhead	1.72	2.12	2.66	2.47	2.37	2.14	3.53
Taxes and insurance	.61	.67	.69	.78	.70	.83	.73
Capital replacement	5.15	5.59	5.81	6.19	5.68	5.65	5.58
Operating capital	.97	1.27	.90	.82	.90	.60	.38
Other nonland capital	1.70	1.60	1.57	1.47	1.17	1.11	1.08
Land	.15	.15	.14	.13	.10	.08	.06
Unpaid labor	4.41	4.90	4.48	4.78	4.50	4.52	4.36
Total, economic costs	48.86	53.17	48.87	54.16	52.28	46.18	43.95
Residual returns to management and risk	-9.26	-9.30	5.60	-7.24	-4.14	-1.96	6.51

Table 60A--U.S. feeder pig production cash costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
				Dollars per cwt				
Cash receipts:								
Feeder pigs	39.88	60.22	52.52	72.26	58.87	61.42	78.83	58.43
Cull sows	4.57	7.06	5.87	8.57	6.78	7.07	8.78	7.52
Total	44.45	67.28	58.40	80.83	65.65	68.49	87.61	65.95
Cash expenses:								
Feed--								
Grain	9.35	15.11	23.35	21.59	19.51	16.23	16.99	19.07
Protein supplements	9.32	20.26	14.94	12.24	12.90	15.00	14.24	15.83
Pasture	.14	.16	.17	.17	.21	.17	.18	.20
Total feed costs	18.81	35.54	38.46	34.00	32.62	31.40	31.41	35.10
Other--								
Veterinary and medicine	.90	.92	1.05	1.41	1.37	1.38	1.41	1.51
Livestock hauling	.07	.08	.09	.10	.11	.12	.13	.14
Marketing	.88	.93	1.03	1.13	1.29	1.27	1.46	1.36
Bedding	.13	.16	.21	.22	.20	.22	.24	.27
Custom feed mixing	.72	.77	.85	.93	.97	1.05	1.13	1.26
Fuel, lube, and electricity	1.90	2.01	2.78	3.10	3.27	3.52	3.69	4.82
Machinery and building repairs	2.22	2.35	2.61	2.87	3.22	3.22	3.34	3.70
Hired labor	.83	.91	1.04	1.12	1.23	1.32	1.41	1.54
Manure credit	-.07	-.07	-.08	-.09	-.11	-.10	-.10	-.11
Total, variable cash expenses	26.39	43.58	48.04	44.78	44.17	43.40	44.12	49.59
General farm overhead	1.42	1.50	1.67	1.83	1.85	2.06	2.82	2.40
Taxes and insurance	1.02	1.05	1.10	1.18	1.20	1.36	1.47	1.71
Interest	3.08	3.61	4.26	5.05	6.47	6.56	8.44	7.05
Total, fixed cash expenses	5.52	6.16	7.03	8.07	9.52	9.98	12.73	11.16
Total, cash expenses	31.92	49.74	55.07	52.85	53.69	53.38	56.85	60.75
Cash receipts less cash expenses	12.54	17.54	3.32	27.98	11.96	15.11	30.76	5.20
Capital replacement	5.81	6.52	4.99	9.17	9.47	10.19	11.26	13.36
Total, cash expenses and replacement	37.72	56.26	60.06	62.02	63.16	63.57	68.11	74.11
Net cash receipts	6.73	11.02	-1.67	18.81	2.49	4.92	19.50	-8.16

Continued--

Table 60B--U.S. feeder pig production economic costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
				Dollars per cwt				
Total, cash receipts	44.45	67.28	58.40	80.83	65.65	68.49	87.61	65.95
Economic (full ownership) costs:								
Variable cash expenses	26.39	43.58	48.04	44.78	44.17	43.40	44.12	49.59
General farm overhead	1.42	1.50	1.67	1.83	1.85	2.06	2.82	2.40
Taxes and insurance	1.02	1.05	1.10	1.18	1.20	1.36	1.47	1.71
Capital replacement	5.81	6.52	4.99	9.17	9.47	10.19	11.26	13.36
Operating capital	.29	.78	.95	.69	.58	.60	.84	1.24
Other nonland capital	3.24	3.42	3.72	4.07	4.39	4.20	4.08	4.04
Land	.21	.25	.37	.44	.50	.56	.59	.67
Unpaid labor	8.45	9.25	10.59	11.40	12.46	13.41	14.34	15.67
Total, economic costs	46.83	66.36	71.43	73.57	74.62	75.78	79.52	88.68
Residual returns to management and risk	-2.38	.92	-13.04	7.27	-8.97	-7.29	8.09	-22.73

Continued--

Table 60A--U.S. feeder pig production cash costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
	Dollars per cwt						
Cash receipts:							
Feeder pigs	51.28	60.87	85.67	61.73	66.60	66.48	76.77
Cull sows	6.85	7.62	9.56	7.78	8.04	7.25	8.39
Total	58.13	68.49	95.23	69.51	74.64	73.73	85.16
Cash expenses:							
Feed--							
Grain	21.54	23.20	18.73	23.79	24.00	19.50	15.14
Protein supplements	17.86	18.77	17.59	18.63	17.40	14.61	15.72
Pasture	.22	.22	.22	.19	.17	.15	.13
Total feed costs	39.62	42.19	36.54	42.61	41.57	34.26	30.99
Other--							
Veterinary and medicine	1.62	1.55	1.62	1.67	1.53	1.47	1.50
Livestock hauling	.16	.18	.19	.20	.20	.20	.20
Marketing	1.35	1.49	1.59	1.48	1.62	1.51	1.63
Bedding	.30	.46	.38	.39	.37	.37	.37
Custom feed mixing	1.40	1.46	1.46	1.44	1.33	1.24	1.19
Fuel, lube, and electricity	6.61	7.68	7.73	7.49	6.80	6.69	6.42
Machinery and building repairs	4.31	4.72	4.93	5.14	4.78	4.82	4.67
Hired labor	1.66	1.87	1.86	2.05	2.62	2.90	2.86
Manure credit	-.14	-.15	-.15	-.15	-.16	-.15	-.14
Total, variable cash expenses	56.89	61.45	56.15	62.32	60.66	53.31	49.69
General farm overhead	2.42	3.16	4.17	4.15	4.85	4.79	5.96
Taxes and insurance	1.63	1.77	1.89	2.10	1.88	1.88	1.87
Interest	7.00	9.17	14.56	8.43	10.84	10.84	10.22
Total, fixed cash expenses	11.05	14.10	20.62	14.68	17.57	17.51	18.05
Total, cash expenses	67.94	75.55	76.77	77.00	78.23	70.82	67.74
Cash receipts less cash expenses	-9.81	-7.06	18.46	-7.49	-3.59	2.91	17.42
Capital replacement	10.77	11.82	12.36	13.35	11.90	11.90	11.64
Total, cash expenses and replacement	78.71	87.37	89.13	90.35	90.13	82.72	79.38
Net cash receipts	-20.58	-18.88	6.10	-20.84	-15.49	-8.99	5.78

Table 60B--U.S. feeder pig production economic costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
	Dollars per cwt						
Total, cash receipts	58.13	68.49	95.23	69.51	74.64	73.73	85.16
Economic (full ownership) costs:							
Variable cash expenses	56.89	61.45	56.15	62.32	60.66	53.31	49.69
General farm overhead	2.42	3.16	4.17	4.15	4.85	4.79	5.96
Taxes and insurance	1.63	1.77	1.89	2.10	1.88	1.88	1.87
Capital replacement	10.77	11.82	12.36	13.35	11.90	11.90	11.64
Operating capital	1.62	2.12	1.56	1.36	1.49	1.02	.67
Other nonland capital	3.96	3.74	3.66	3.44	2.74	2.74	2.48
Land	.75	.77	.72	.64	.50	.41	.30
Unpaid labor	16.89	18.37	16.86	17.95	16.79	16.79	16.62
Total, economic costs	94.93	103.19	97.36	105.32	100.80	92.84	89.23
Residual returns to management and risk	-36.80	-34.70	-2.13	-35.81	-26.16	-19.11	-4.07

Table 61A--U.S. feeder pig finishing production cash costs and returns , all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
				Dollars per cwt				
Cash receipts:								
Slaughter hogs	26.02	39.29	34.26	47.14	47.98	40.07	47.82	46.92
Total	26.02	39.29	34.26	47.14	47.98	40.07	47.82	46.92
Cash expenses:								
Feeders--								
Feeder pigs	10.34	13.95	9.81	17.48	23.71	13.82	19.31	23.18
Feed--								
Grain	6.66	10.75	16.61	15.36	12.79	11.55	10.47	11.33
Protein supplements	5.61	12.21	9.01	7.38	6.98	9.04	8.08	9.04
Pasture	.01	.01	.01	.01	.01	.01	.01	.01
Total feed costs	12.28	22.97	25.63	22.75	19.78	20.60	18.56	20.38
Other--								
Veterinary and medicine	.22	.23	.26	.35	.34	.34	.35	.37
Livestock hauling	.05	.06	.07	.08	.08	.09	.09	.11
Marketing	.23	.25	.28	.30	.35	.34	.39	.36
Bedding	.03	.04	.06	.06	.05	.06	.06	.07
Custom feed mixing	.06	.06	.07	.07	.07	.08	.08	.09
Fuel, lube, and electricity	.39	.42	.58	.64	.68	.73	.77	1.01
Machinery and building repairs	.70	.74	.82	.90	1.01	1.01	1.05	1.16
Hired labor	.17	.19	.21	.23	.25	.27	.29	.32
Manure credit	-.07	-.07	-.08	-.09	-.11	-.10	-.10	-.11
Total, variable cash expenses	24.41	38.83	37.69	42.77	46.21	37.24	40.85	46.94
General farm overhead	.86	.91	1.01	1.10	1.39	1.24	1.58	1.76
Taxes and insurance	1.28	1.32	1.39	1.49	1.54	1.71	1.93	3.18
Interest	1.74	2.04	2.41	2.85	4.55	3.70	4.50	4.94
Total, fixed cash expenses	3.88	4.26	4.80	5.44	7.48	6.65	8.01	9.88
Total, cash expenses	28.29	43.09	42.49	48.20	53.69	43.89	48.86	56.82
Cash receipts less cash expenses	-2.27	-3.80	-8.23	-1.06	-5.71	-3.82	-1.04	-9.90
Capital replacement	1.41	1.59	1.22	2.23	2.65	2.48	2.47	2.91
Total, cash expenses and replacement	29.70	44.68	43.71	50.44	56.34	46.37	51.33	59.73
Net cash returns	-3.68	-5.39	-9.44	-3.29	-8.36	-6.30	-3.51	-12.81

Continued--

Table 61B--U.S. feeder pig finishing production economic costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
				Dollars per cwt				
Total, cash receipts	26.02	39.29	34.26	47.14	47.98	40.07	47.82	46.92
Economic (full ownership) costs:								
Variable cash expenses	24.41	38.83	37.69	42.77	46.21	37.24	40.85	46.94
General farm overhead	.86	.91	1.01	1.10	1.39	1.24	1.58	1.76
Taxes and insurance	1.28	1.32	1.39	1.49	1.54	1.71	1.93	3.18
Capital replacement	1.41	1.59	1.22	2.23	2.65	2.48	2.47	2.91
Operating capital	.18	.46	.50	.44	.41	.34	.52	.78
Other nonland capital	.75	.79	.86	.94	1.02	.97	.94	.94
Land	.01	.02	.02	.03	.03	.04	.04	.04
Unpaid labor	.67	.73	.84	.90	.99	1.06	1.14	1.24
Total, economic costs	29.57	44.64	43.52	49.89	54.24	45.08	49.46	57.80
Residual returns to management and risk	-3.55	-5.36	-9.26	-2.75	-6.26	-5.01	-1.64	-10.88

Continued--

Table 61A--U.S. feeder pig finishing production cash costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
				Dollars per cwt			
Cash receipts:							
Slaughter hogs	39.30	43.86	54.53	47.34	48.42	44.61	50.49
Total	39.30	43.86	54.53	47.34	48.42	44.61	50.49
Cash expenses:							
Feeders--							
Feeder pigs	13.16	17.54	22.40	20.05	17.33	18.76	19.94
Feed--							
Grain	11.65	12.59	10.19	12.97	13.21	10.79	8.37
Protein supplements	6.55	6.89	6.38	6.81	6.31	5.17	5.58
Pasture	.02	.02	.02	.02	.02	.01	.01
Total feed costs	18.22	19.50	16.59	19.80	19.54	15.97	13.96
Other--							
Veterinary and medicine	.40	.43	.44	.46	.46	.46	.47
Livestock hauling	.12	.14	.15	.16	.16	.16	.16
Marketing	.36	.39	.42	.39	.42	.39	.42
Bedding	.08	.11	.10	.10	.10	.10	.10
Custom feed mixing	.10	.10	.09	.09	.08	.07	.06
Fuel, lube, and electricity	1.38	1.50	1.49	1.38	1.15	1.05	.99
Machinery and building repairs	1.35	1.50	1.59	1.66	1.58	1.63	1.57
Hired labor	.34	.38	.36	.39	.40	.42	.41
Manure credit	-.14	-.15	-.16	-.15	-.16	-.15	-.14
Total, variable cash expenses	35.37	41.44	43.47	44.33	41.06	38.86	37.94
General farm overhead	1.68	2.08	2.68	1.99	2.74	2.44	3.53
Taxes and insurance	.32	.36	.39	.42	.40	.43	.46
Interest	4.63	5.90	8.27	5.73	7.03	5.45	6.06
Total, fixed cash expenses	6.63	8.34	11.34	8.14	10.17	8.32	10.05
Total, cash expenses	42.00	49.78	54.81	52.47	51.23	47.18	47.99
Cash receipts less cash expenses	-2.70	-5.92	-.28	-5.13	-2.81	-2.57	2.50
Capital replacement	2.51	2.77	2.92	3.04	2.93	3.00	2.95
Total, cash expenses and replacement	44.51	52.55	57.73	55.51	54.16	50.18	50.94
Net cash returns	-5.21	-8.69	-3.20	-8.17	-5.74	-5.57	-.45

Table 61B--U.S. feeder pig finishing production economic costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
				Dollars per cwt			
Total, cash receipts	39.30	43.86	54.53	47.34	48.42	44.61	50.49
Economic (full ownership) costs:							
Variable cash expenses	35.37	41.44	43.47	44.33	41.06	38.86	37.94
General farm overhead	1.68	2.08	2.68	1.99	2.74	2.44	3.53
Taxes and insurance	.32	.36	.39	.42	.40	.43	.46
Capital replacement	2.51	2.77	2.92	3.04	2.93	3.00	2.95
Operating capital	.67	.95	.80	.65	.67	.50	.34
Other nonland capital	.92	.87	.85	.80	.63	.60	.58
Land	.05	.05	.05	.04	.03	.03	.02
Unpaid labor	1.34	1.46	1.34	1.42	1.37	1.38	1.33
Total, economic costs	42.86	49.98	52.50	52.69	49.83	47.23	47.15
Residual returns to management and risk	-3.56	-6.12	2.03	-5.35	-1.41	-2.62	3.34

Table 62A--U.S. sheep production cash costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
	Dollars per ewe							
Cash receipts								
Slaughter lambs	9.85	12.00	13.00	14.53	15.65	17.46	19.91	21.03
Feeder lambs	6.99	8.58	8.06	9.27	11.35	12.57	17.72	18.41
Cull ewes	1.72	3.30	2.63	2.56	3.30	3.45	4.70	5.52
Wool	2.60	6.15	4.39	3.32	4.88	5.35	5.54	6.42
Wool payment	2.75	0	.96	2.03	.47	2.01	2.49	2.13
Unshorn lamb payment	.75	0	.26	.55	.13	.55	.66	.71
Total	24.66	30.03	29.32	32.26	35.78	41.40	51.02	54.21
Cash expenses:								
Feed--								
Grain	1.11	1.79	2.77	2.56	2.36	1.92	1.99	2.24
Protein supplements	1.76	3.82	2.82	2.31	2.31	2.83	2.85	3.21
Salt and minerals	.13	.14	.15	.17	.19	.21	.23	.26
Hay	2.24	2.55	2.99	3.74	3.89	2.89	2.69	2.45
Pasture	1.81	2.07	2.14	2.14	2.19	2.18	2.41	2.70
Public grazing	1.25	1.31	1.41	1.41	1.65	.73	.73	.93
Crop residue	.05	.05	.05	.05	.05	.05	.05	.04
Total feed costs	8.34	11.74	12.34	12.39	12.64	10.82	10.95	11.84
Other--								
Veterinary and medicine	.60	.62	.59	.62	.59	.61	.66	.73
Livestock hauling	.66	.73	.66	.72	.66	.71	.76	.87
Marketing	.15	.16	.15	.16	.15	.16	.17	.19
Ram death loss	.13	.14	.15	.17	.18	.19	.26	.34
Shearing and tagging	.58	.62	.68	.75	.79	.84	.90	.98
Fuel, lube, and electricity	.50	.53	.74	.82	.87	.93	.98	1.28
Machinery and building repairs	2.57	2.62	2.82	2.98	2.87	1.22	1.32	1.45
Hired labor	2.72	2.98	3.41	3.67	4.15	4.32	4.62	5.05
Miscellaneous	.44	.47	.52	.57	.60	.64	.69	.77
Total, variable cash expenses	16.70	20.60	22.07	22.84	23.49	20.44	21.31	23.51
General farm overhead	.98	1.33	1.19	1.33	1.57	1.82	2.40	2.89
Taxes and insurance	.90	.92	.97	1.04	1.26	1.19	1.20	1.45
Interest	1.05	1.52	1.31	1.46	2.20	2.33	3.96	5.56
Total, fixed cash expenses	2.93	3.78	3.47	3.82	5.03	5.35	7.57	9.90
Total, cash expenses	19.63	24.38	25.54	26.66	28.52	25.79	28.87	33.41
Cash receipts less cash expenses	5.03	5.64	3.78	5.60	7.26	15.61	22.14	20.80
Capital replacement	2.19	2.32	2.52	2.75	2.90	2.84	3.89	4.90
Total, cash expenses and replacement	21.82	26.70	28.06	29.42	31.42	28.64	32.76	38.31
Net cash receipts	2.84	3.33	1.26	2.84	4.36	12.76	18.26	15.90

Continued--

Table 62B--U.S. sheep production economic costs and returns, all sizes of operation, 1972-86

Item	1972	1973	1974	1975	1976	1977	1978	1979
	Dollars per ewe							
Total, cash receipts	24.66	30.03	29.32	32.26	35.78	41.40	51.02	54.21
Economic (full ownership) costs:								
Variable cash expenses	16.70	20.60	22.07	22.84	23.49	20.44	21.31	23.51
General farm overhead	.98	1.33	1.19	1.33	1.57	1.82	2.40	2.89
Taxes and insurance	.90	.92	.97	1.04	1.26	1.19	1.20	1.45
Capital replacement	2.19	2.32	2.52	2.75	2.90	2.84	3.89	4.90
Operating capital	.37	.74	.87	.70	.62	.56	.81	1.18
Other nonland capital	1.58	1.67	1.82	1.99	2.09	2.05	2.81	3.54
Land	3.10	3.76	4.86	5.59	6.07	6.44	6.87	7.95
Unpaid labor	4.12	4.62	5.42	5.75	6.42	6.58	6.75	7.38
Total, economic costs	29.96	35.96	39.72	41.98	44.42	41.93	46.03	52.79
Residual returns to management and risk	-5.3	-5.9	-10.4	-9.7	-8.6	-.5	5.0	1.41

Continued--

Table 62A--U.S. sheep production cash costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
	Dollars per ewe						
Cash receipts							
Slaughter lambs	20.46	16.03	16.60	16.39	19.93	21.58	20.84
Feeder lambs	15.74	13.30	13.49	12.30	15.02	18.48	18.76
Cull ewes	3.55	3.43	3.05	2.17	3.20	6.06	5.97
Wool	6.55	7.45	6.28	6.72	8.81	6.84	7.34
Wool payment	3.19	6.30	10.05	9.47	9.47	10.99	12.22
Unshorn lamb payment	.76	.88	1.50	1.56	1.81	2.21	2.42
Total	50.25	47.39	50.97	48.61	58.24	66.16	67.55
Cash expenses:							
Feed--							
Grain	2.56	2.13	2.14	2.38	2.52	2.01	1.60
Protein supplements	3.64	3.38	3.16	3.60	3.39	3.40	3.68
Salt and minerals	.32	.35	.37	.38	.38	.40	.40
Hay	2.93	3.53	3.71	3.65	3.74	3.90	2.93
Pasture	3.05	3.19	3.11	3.16	3.43	3.31	3.29
Public grazing	1.13	1.11	.91	.70	.71	.67	.68
Crop residue	.05	.06	.05	.06	.06	.05	.05
Total feed costs	13.68	13.75	13.45	13.93	14.23	13.74	12.63
Other--							
Veterinary and medicine	.83	.91	.98	.99	1.04	1.05	1.08
Livestock hauling	1.00	1.12	1.18	1.20	1.25	1.28	1.25
Marketing	.22	.24	.26	.27	.28	.29	.29
Ram death loss	.33	.31	.29	.28	.27	.27	.27
Shearing and tagging	1.06	1.14	1.18	1.21	1.23	1.24	1.30
Fuel, lube, and electricity	1.75	1.98	1.93	1.82	1.49	1.53	1.12
Machinery and building repairs	1.59	1.74	2.19	2.29	2.26	2.39	2.30
Hired labor	5.44	5.83	6.05	6.22	6.34	6.49	6.78
Miscellaneous	.87	.96	1.02	1.04	1.08	1.12	1.15
Total, variable cash expenses	26.77	27.98	28.53	29.25	29.47	29.40	28.17
General farm overhead	3.06	3.20	4.47	2.86	3.74	3.25	3.38
Taxes and insurance	1.55	1.57	1.80	1.82	1.70	1.82	2.38
Interest	5.84	6.69	6.55	5.32	5.99	6.87	7.43
Total, fixed cash expenses	10.45	11.47	12.82	10.00	11.43	11.94	13.19
Total, cash expenses	37.22	39.45	41.35	39.25	40.90	41.34	41.36
Cash receipts less cash expenses	13.03	7.94	9.62	9.36	17.34	24.82	26.19
Capital replacement	5.12	5.69	6.58	6.95	7.38	7.61	7.53
Total, cash expenses and replacement	42.34	45.14	47.93	46.20	48.28	48.95	48.89
Net cash receipts	7.91	2.25	3.04	2.41	9.96	17.21	18.66

Table 62B--U.S. sheep production economic costs and returns, all sizes of operation, 1972-86--continued

Item	1980	1981	1982	1983	1984	1985	1986
	Dollars per ewe						
Total, cash receipts	50.25	47.39	50.97	48.61	58.24	66.16	67.55
Economic (full ownership) costs:							
Variable cash expenses	26.77	27.98	28.53	29.25	29.47	29.40	28.17
General farm overhead	3.06	3.20	4.47	2.86	3.74	3.25	3.38
Taxes and insurance	1.55	1.57	1.80	1.82	1.70	1.82	2.38
Capital replacement	5.12	5.69	6.58	6.95	7.38	7.61	7.53
Operating capital	1.52	1.93	1.58	1.28	1.44	1.13	.76
Other nonland capital	4.63	4.11	4.52	4.36	4.95	2.72	2.72
Land	9.44	9.75	10.13	9.26	8.86	6.56	5.44
Unpaid labor	6.40	6.97	7.14	7.33	7.70	7.77	8.13
Total, economic costs	58.49	61.21	64.75	63.11	65.24	60.26	58.51
Residual returns to management and risk	-8.24	-13.82	-13.78	-14.50	-7.00	5.90	9.04

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